



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	02/17/2015	8955867	2003127.00122US3	2029
23483	7590	01/27/2015		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109				

**ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**  
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Richard J. Howell, Stowe, VT;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit [SelectUSA.gov](http://SelectUSA.gov).

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23483 7590 10/03/2014  
**WILMERHALE/BOSTON**  
**60 STATE STREET**  
**BOSTON, MA 02109**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029

TITLE OF INVENTION: ALPINE SKI BINDING HEEL UNIT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/05/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
AVERY, BRIDGET D	3618	280-628000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Wilmer Cutler Pickering

2 Hale and Dorr LLP

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

**Kneebinding, Inc.**

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

**Stowe, Vermont**

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)

- ☐ A check is enclosed.
- ☒ Payment by credit card. ~~XXXXXX-XXXX-XXXX-XXXX~~
- ☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 08-0219 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

**NOTE:** Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

**NOTE:** If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

**NOTE:** Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

**NOTE:** This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Donald R Steinberg/

Date December 31, 2014

Typed or printed name Donald R. Steinberg

Registration No. 37,241

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SECOND REQUEST FOR REFUND**

Applicant respectfully requests acknowledgement of the Request for Refund filed on November 26, 2013.

To reiterate, in accordance with 37 C.F.R. 1.26 and 1.28, Applicants request a refund of \$850.00 for the RCE fee for the following:

On April 8, 2013, an Office Action issued in the above-referenced application. The cover page designated the Office Action as non-final, while paragraph 3 of the Office stated that it was Final. In an abundance of caution, the Applicant filed an RCE along with the Response filed on October 8, 2013.

On November 8, 2013, Applicant received a Notice of Improper Request for Continued Examination. Since the Examiner has determined that the Office Action was intended to be non-final, Applicant hereby requests a refund for the RCE charge incurred on October 9, 2013 in the amount of \$850.00 in the above-referenced application to Deposit Account No. 08-0219.

Respectfully submitted,

Dated: January 2, 2015

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

/Donald R Steinberg/  
Donald R. Steinberg  
Registration No.: 37,241  
Attorney for Applicant(s)

ActiveUS 139234569v.1

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL UNIT		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Donald R. Steinberg/Becky Douglas		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Filing Fees for Utility under 35 USC 111(a)</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
Utility Appl Issue Fee	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

Electronic Acknowledgement Receipt	
<b>EFS ID:</b>	21106720
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL UNIT
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Donald R. Steinberg
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	02-JAN-2015
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	16:28:32
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 480
RAM confirmation Number	1480
Deposit Account	080219
Authorized User	STEINBERG, DONALD R.
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

# File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	2015_01_02_122US3_IssueFee Transmittal_USSN_12_984293.PDF	108819 cc2ad0559f03d5ef78696df656e4432bb5fc ef5c	no	1

## Warnings:

## Information:

2	Refund Request	2015_01_02_122US3_Request Refund_USSN_12_984293.PDF	84546 219f3f38ef99327bb81adf11fd4dad520b4 6992	no	1
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## Warnings:

## Information:

3	Fee Worksheet (SB06)	fee-info.pdf	30613 2b1ade62b850366f788f31d07223ebe7177 6a43d	no	2
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## Warnings:

## Information:

<b>Total Files Size (in bytes):</b>	223978
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23483 7590 10/03/2014  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

EXAMINER

AVERY, BRIDGET D

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 10/03/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029

TITLE OF INVENTION: ALPINE SKI BINDING HEEL UNIT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/05/2015

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**



# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23483 7590 10/03/2014  
**WILMERHALE/BOSTON**  
**60 STATE STREET**  
**BOSTON, MA 02109**

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## Certificate of Mailing or Transmission

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029

TITLE OF INVENTION: ALPINE SKI BINDING HEEL UNIT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/05/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
AVERY, BRIDGET D	3618	280-628000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. <b>Use of a Customer Number is required.</b></p>	<p>2. For printing on the patent front page, list</p> <p>(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____</p> <p>3 _____</p>
---	---

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (<b>Please first reapply any previously paid issue fee shown above</b>)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

**NOTE:** Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

**NOTE:** If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

**NOTE:** Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

**NOTE:** This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	10/03/2014	EXAMINER	
WILMERHALE/BOSTON			AVERY, BRIDGET D	
60 STATE STREET			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	

3618

DATE MAILED: 10/03/2014

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b> 12/984,293	<b>Applicant(s)</b> HOWELL, RICHARD J.	
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618	<b>AIA (First Inventor to File) Status</b> No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/24/14.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 1-9. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**  
a) ☐ All    b) ☐ Some    \*c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment
2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____	6. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance
3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	7. <input type="checkbox"/> Other _____.
4. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____.	

	/J. ALLEN SHRIVER II/ Supervisory Patent Examiner, Art Unit 3618
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1. The present application is being examined under the pre-AIA first to invent provisions.

#### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

3. Claims 10-14 have been canceled.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on 7:00AM-5:30PM Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. ALLEN SHRIVER II/  
Supervisory Patent Examiner, Art Unit 3618

/BRIDGET AVERY/  
Examiner, Art Unit 3618

<b>Notice of References Cited</b>	Application/Control No. 12/984,293		Applicant(s)/Patent Under Reexamination HOWELL, RICHARD J.	
	Examiner BRIDGET AVERY		Art Unit 3618	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2,745,672	05-1956	MEIER JR ROBERT C	280/627
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	796	"280"/\$.ccls. and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/12:16:51
S2	687	S1 and (lateral\$ or horizontal\$ or vertor\$)	USPAT	OR	OFF	2006/10/12:16:50
S3	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/12:16:51
S4	455	S3 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
S5	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/16:10:56
S6	455	S5 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
S7	395	S6 and (lateral or horizontal)	USPAT	OR	OFF	2006/10/16:10:57
S8	334	S6 and lateral	USPAT	OR	OFF	2006/10/16:10:57
S9	177	S6 and (lateral with release)	USPAT	OR	OFF	2006/10/16:10:58
S10	129	S6 and (lateral near4 release)	USPAT	OR	OFF	2006/10/16:10:58
S11	1	("4070034").PN.	USPAT	OR	OFF	2006/12/19:04:08
S12	2	((("4070034") or ("3734522"))).PN.	USPAT	OR	OFF	2006/12/19:04:09
S13	0	("skiandheelandlateral").PN.	USPAT	OR	OFF	2007/03/26:17:50
S14	2059	ski and heel and lateral	USPAT	OR	OFF	2007/03/26:17:50
S15	1242	"280"/\$.ccls. and (ski and heel and lateral)	USPAT	OR	OFF	2007/03/26:17:51
S16	1282	"280"/\$.ccls. and (ski and heel and (lateral adj "2" release))	USPAT	OR	OFF	2007/03/26:17:51
S17	166	(280/629).CCLS.	USPAT	OR	OFF	2007/07/09:14:21
S18	115	S17 and release	USPAT	OR	OFF	2007/07/09:14:22
S19	15	S17 and release with horizontal	USPAT	OR	OFF	2007/07/09:14:22
S20	15	S17 and (release with horizontal)	USPAT	OR	OFF	2007/07/09:14:25
S21	6	S20 and heel	USPAT	OR	OFF	2007/07/09:14:25
S22	1293	((280/632) or (280/634) or (280/618) or	USPAT	OR	OFF	2010/09/26:



		(280/624) or (280/625) or (280/626) or (280/627)).CCLS.				21:50
S23	476	S22 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/26 21:50
S24	9	("20020101063"   "2676813"   "3734522"   "3773344"   "3825273"   "3992032"   "4052086"   "4070034").PN. OR ("7318598").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/09/27 16:16
S25	31	US-2676813-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3727932-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-4065151-\$.DID. OR US-4264088-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-7225104-\$.DID. OR US-4553772-\$.DID. OR US-4753452-\$.DID. OR US-20020101063-\$.DID. OR US-4070034-\$.DID. OR US-4052086-\$.DID. OR US-3992032-\$.DID. OR US-3825273-\$.DID. OR US-3773344-\$.DID. OR US-3734522-\$.DID.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/09/27 17:11
S26	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:29
S27	0	("6nots23").PN.	USPAT; USOCR	OR	OFF	2010/09/27 17:30
S28	1293	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2010/09/27 17:30
S29	476	S28 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/27 17:30
S30	104	S26 not S29	USPAT	OR	OFF	2010/09/27 17:30
S31	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:34
S35	49	US-2676813-\$.DID. OR US-20020101063-\$.DID. OR US-3578350-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3620545-\$.DID. OR US-3695625-\$.DID. OR US-3727932-\$.DID. OR US-3734520-\$.DID. OR US-3734522-\$.DID. OR US-3773344-\$.DID. OR US-3825273-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-3992032-\$.DID. OR US-7915705-\$.DID. OR US-4052086-\$.DID. OR US-4065151-\$.DID. OR US-4070034-\$.DID. OR US-4111453-\$.DID. OR US-4183549-\$.DID. OR US-4264088-\$.DID. OR US-4266806-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-4444413-\$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 13:37

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S37	160	("3129951"   "3317217"   "3325178"   "3326567"   "3351354"   "3366394"   "3408087"   "3432180"   "3473817"   "3497230"   "3527468"   "3529845"   "3529846"   "3550996"   "3554571"   "3554572"   "3578350"   "3580597"   "3594015"   "3604720"   "3606369"   "3608918"   "3610650"   "3620544"   "3620545"   "3625532"   "3675937"   "3727935"   "3733082"   "3734520"   "3762735"   "3778073"   "3820804"   "3830510"   "3836163"   "3876219"   "3909023"   "3933363"   "3937480"   "3944237"   "3950001"   "3989273"   "3989274"   "4022493"   "4033603"   "4060257"   "4103930"   "4111453"   "4165883"   "4183549"   "4188045"   "4190264"   "4214773"   "4307895"   "4421341"   "4444413"   "4489956"   "4533155"   "4607859"   "4624473"   "4625991"   "4681338"   "4773669"   "5024457"   RE26670).PN. OR ("3578350"   "3620545"   "3695625"   "3734520"   "4111453"   "4183549"   "4266806"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4602804"   "4625991"   "4758017"   "5160159").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 14:01
S38	1	"12984293"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/12 13:08
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S40	367	S39 and ((horizontal or lateral) with release)	USPAT	OR	OFF	2012/06/12 14:16
S41	245	S39 and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:16
S42	189	S39 and heel and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:17
S43	2	"20030107352"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/14 11:20
S44	1336	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).OCLS.	USPAT	OR	OFF	2013/03/25 13:08
S45	555	S44 and ((lateral or side) with (pressure or force))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
S46	418	S45 and heel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
S47	398	S45 and heel and (boot or footwear)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:10
S48	356	S45 and heel and (boot or footwear) and (release or releasing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:11
S49	292	S45 and heel and (boot or footwear) and ((side or lateral) same (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
S50	241	S45 and heel and (boot or footwear) and ((side or lateral) with (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
S51	67	S45 and heel and (boot or footwear) and ((side or lateral) with (release or	US-PGPUB; USPAT;	OR	ON	2013/03/25 13:22


		releasing) with (limit or limited or predetermined))	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S52	6	"12001436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/03 13:53
S53	2	("7887084").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/02/03 13:55
S54	43	"280"/\$.ccls. and (ski and "heel assembly")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/06 12:20
S55	38	(US-5160159-\$ or US-3620545-\$ or US-3578350-\$ or US-3695625-\$ or US-3734520-\$ or US-4111453-\$ or US-4183549-\$ or US-4266806-\$ or US-4444413-\$ or US-4449731-\$ or US-4451059-\$ or US-4466634-\$ or US-4475743-\$ or US-4489956-\$ or US-4602804-\$ or US-4625991-\$ or US-4758017-\$ or US-4165883-\$ or US-3687470-\$ or US-3773344-\$ or US-3920256-\$ or US-4142735-\$ or US-4145071-\$ or US-4340242-\$ or US-4360219-\$ or US-4395055-\$).did. or (US-4478426-\$ or US-4624473-\$ or US-4624474-\$ or US-4647065-\$ or US-4732405-\$ or US-4804202-\$ or US-4858946-\$ or US-5199736-\$ or US-3572738-\$ or US-3992032-\$ or US-4505494-\$ or US-4533156-\$).did.	USPAT	OR	OFF	2014/09/27 23:31
S56	66	(US-5160159-\$ or US-3620545-\$ or US-3578350-\$ or US-3695625-\$ or US-3734520-\$ or US-4111453-\$ or US-4183549-\$ or US-4266806-\$ or US-4444413-\$ or US-4449731-\$ or US-4451059-\$ or US-4466634-\$ or US-4475743-\$ or US-4489956-\$ or US-4602804-\$ or US-4625991-\$ or US-4758017-\$ or US-4165883-\$ or US-3687470-\$ or US-3773344-\$ or US-3920256-\$ or US-4142735-\$ or US-4145071-\$ or US-4340242-\$ or US-4360219-\$ or US-4395055-\$).did. or (US-4478426-\$ or US-4624473-\$ or US-4624474-\$ or US-4647065-\$ or US-4732405-\$ or US-4804202-\$ or US-4858946-\$ or US-5199736-\$ or US-	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/27 23:32

		3572738-\$ or US-3992032-\$ or US-4505494-\$ or US-4533156-\$).did.				
S57	38	S56 AND ( (A63C9/0846 OR A63C9/0842 OR A63C9/0847 OR A63C9/0805 OR A63C9/005 OR A63C9/0845 OR A63C9/086 OR A63C9/081 OR A63C9/08564 OR A63C9/001 OR A63C9/0844 OR A63C9/08542 OR A63C9/0855 OR A63C9/0848 OR A63C9/007 OR A63C9/08571 OR A63C9/08578 OR A63C9/08521 OR A63C7/1013 OR A63C9/08 OR A63C9/0807 OR A63C9/08535 OR A63C9/08585 OR A63C7/1093 OR A63C9/003 OR A63C9/0802 OR A63C9/082 OR A63C9/0841 OR A63C9/085 OR A63C9/08507 OR A63C9/08528 OR Y10S280/12).CPC. )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/27 23:33
S58	14661	(A63C9/0846 OR A63C9/0842 OR A63C9/0847 OR A63C9/0805 OR A63C9/005 OR A63C9/0845 OR A63C9/086 OR A63C9/081 OR A63C9/08564 OR A63C9/001 OR A63C9/0844 OR A63C9/08542 OR A63C9/0855 OR A63C9/0848 OR A63C9/007 OR A63C9/08571 OR A63C9/08578 OR A63C9/08521 OR A63C7/1013 OR A63C9/08 OR A63C9/0807 OR A63C9/08535 OR A63C9/08585 OR A63C7/1093 OR A63C9/003 OR A63C9/0802 OR A63C9/082 OR A63C9/0841 OR A63C9/085 OR A63C9/08507 OR A63C9/08528 OR Y10S280/12).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/27 23:35
S59	773	S58 and heel and (boot or footwear) and ((side or lateral) with (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/27 23:37
S60	14661	(A63C9/0846 OR A63C9/0842 OR A63C9/0847 OR A63C9/0805 OR A63C9/005 OR A63C9/0845 OR A63C9/086 OR A63C9/081 OR A63C9/08564 OR A63C9/001 OR A63C9/0844 OR A63C9/08542 OR A63C9/0855 OR A63C9/0848 OR A63C9/007 OR A63C9/08571 OR A63C9/08578 OR A63C9/08521 OR A63C7/1013 OR A63C9/08 OR A63C9/0807 OR A63C9/08535 OR A63C9/08585 OR A63C7/1093 OR A63C9/003 OR A63C9/0802 OR A63C9/082 OR A63C9/0841 OR A63C9/085 OR A63C9/08507 OR A63C9/08528 OR Y10S280/12).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/09/28 15:14
S61	508	S60 and heel and (boot or footwear) and (heel same ((side or lateral) with (release or releasing))))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/09/28 15:14

EAST Search History

			DERWENT; IBM_TDB			
S62	447	S61 and (force or pressure or impact)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/09/28 15:15

9/ 28/ 2014 10:22:23 PM  
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<b>Search Notes</b>  	<b>Application/Control No.</b>  12984293	<b>Applicant(s)/Patent Under Reexamination</b>  HOWELL, RICHARD J.
	<b>Examiner</b>  BRIDGET AVERY	<b>Art Unit</b>  3618

CPC- SEARCHED		
Symbol	Date	Examiner


CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
A63C9/0846 OR A63C9/0842 OR A63C9/0847 OR A63C9/0805 OR A63C9/005 OR A63C9/0845 OR A63C9/086 OR A63C9/081 OR A63C9/08564 OR A63C9/001 OR A63C9/0844 OR A63C9/08542 OR A63C9/0855 OR A63C9/0848 OR A63C9/	9/27/14	BA
A63C9/08578 OR A63C9/08521 OR A63C7/1013 OR A63C9/08 OR A63C9/0807 OR A63C9/08535 OR A63C9/08585 OR A63C7/1093 OR A63C9/003 OR A63C9/0802 OR A63C9/082 OR A63C9/0841 OR A63C9/085 OR A63C9/08507 OR A63C	9/27/2014	BA

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
280	618, 624, 625, 626, 627, 628, 62, 632, 634	6/6/11	BA
search	updated	6/25/12	BA
search	updated	3/25/13	BA
search	updated	2/5/14	BA
search	updated	9/27/14	BA

SEARCH NOTES		
Search Notes	Date	Examiner

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
see	EAST search	9/27/14	BA

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<b>Issue Classification</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.	
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618	

CPC					
Symbol				Type	Version
A63C		9	0844	F	2013-01-01
A63C		9	001	I	2013-01-01
A63C		9	0845	I	2013-01-01
A63C		9	0846	I	2013-01-01

CPC Combination Sets					
Symbol			Type	Set	Ranking

/BRIDGET AVERY/ Examiner.Art Unit 3618  (Assistant Examiner)	9/27/14  (Date)	<b>Total Claims Allowed:</b>  9	
/J. ALLEN SHRIVER II/ Supervisory Patent Examiner.Art Unit 3618  (Primary Examiner)	09/29/2014  (Date)	O.G. Print Claim(s)  1	O.G. Print Figure  2



<b>Issue Classification</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION														
CLASS			SUBCLASS			CLAIMED					NON-CLAIMED									
280			628			A	6	3	C	9 / 00 (2012.01.01)										
CROSS REFERENCE(S)																				
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																			
280	632																			
																</				

/BRIDGET AVERY/ Examiner.Art Unit 3618  (Assistant Examiner)	9/27/14  (Date)	<b>Total Claims Allowed:</b>  9	
/J. ALLEN SHRIVER II/ Supervisory Patent Examiner.Art Unit 3618  (Primary Examiner)	09/29/2014  (Date)	O.G. Print Claim(s)  1	O.G. Print Figure  2



Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL  
(Submitted Only via EFS-Web)**

Application Number	12984293	Filing Date	2011-01-04	Docket Number (if applicable)	2003127.00122US3	Art Unit	3618
First Named Inventor	Richard J. HOWELL			Examiner Name	B. D. Avery		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

**SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

☐ Other \_\_\_\_\_

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☒ Other \_\_\_\_\_  
Petition for a One-Month Extension of Time and appropriate fee \_\_\_\_\_

**MISCELLANEOUS**

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other \_\_\_\_\_

**FEES**

☒ The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.  
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to  
Deposit Account No 08-0219

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Donald R Steinberg/	Date (YYYY-MM-DD)	2014-06-24
Name	Donald R. Steinberg	Registration Number	37241

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL UNIT		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Donald R. Steinberg/Janice Roussel		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Utility under 35 USC 111 (a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 1 month with \$0 paid	2251	1	100	100

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
RCE - 2nd and Subsequent Request	2820	1	850	850
<b>Total in USD (\$)</b>				<b>950</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	19388416
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL UNIT
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Donald R. Steinberg/Janice Roussel
<b>Filer Authorized By:</b>	Donald R. Steinberg
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	24-JUN-2014
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	10:42:24
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 950
RAM confirmation Number	8976
Deposit Account	080219
Authorized User	STEINBERG, DONALD R.
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	



Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2014_06_24_122US3_Amendment_US_Pat_Appln_No_12984293.PDF	150649  7e1d92fb39bd57478ce81f992cfc53b5fd0bf227	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment Submitted/Entered with Filing of CPA/RCE		1	1	
	Claims		2	3	
	Applicant Arguments/Remarks Made in an Amendment		4	7	
Warnings:					
Information:					
2	Extension of Time	2014_06_24_122US3_EOT_US_Pat_Appln_No_12984293.PDF	78047  fa2474c47089227bebb7615a0092ea57b28b246e	no	1
Warnings:					
Information:					
3	Request for Continued Examination (RCE)	2014_06_24_122US2_RCE_US_Pat_Appln_No_12984293.PDF	697772  8b82a1e2fc7f90457e0c858869d17e620bf6590	no	3
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32181  32c551ef4da7397f0987fdd0aa3f48a79ce98100	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			958649		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Docket No.: 2003127.00122US3  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL UNIT		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT AFTER FINAL ACTION UNDER 37 C.F.R. 1.116**

Dear Madam:

**INTRODUCTORY COMMENTS**

In response to the Office Action dated March 4, 2014 finally rejecting claims 1-9, please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 4 of this paper.

A Request for Continued Examination and appropriate fee, as well as a request for a one-month extension of time and appropriate fee, are enclosed herewith.

### **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A vector decoupling assembly for separating and isolating two or more force vectors applied to a safety binding securing a heel portion of a ski boot to a ski, comprising:
  - a lower heel assembly attached to the ski;
  - an upper heel assembly coupled to the lower heel assembly and having a lateral release assembly for applying lateral securing pressure to the ski boot, the upper heel assembly comprising an upper heel housing that is configured to compress the heel portion of the ski boot downward;
  - a linkage element fixedly attached to the lateral release assembly;wherein the linkage element, a first surface and a second surface cooperate to limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski.
2. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface are substantially parallel to one another.
3. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface cooperate to limit motion of the linkage element to the longitudinal and horizontal plane of the ski.
4. (Previously presented) The vector decoupling assembly of claim 1, wherein the lateral release assembly is maintained in a predetermined neutral position in the absence of force vectors applied to the vector decoupling assembly.
5. (Previously presented) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves in both a first direction and a second direction with respect to the neutral position.
6. (Previously presented) The vector decoupling assembly of claim 5, wherein the motion of the lateral release assembly is at least partially rotational.
7. (Previously presented) The vector decoupling assembly of claim 5, wherein a force required

to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.

8. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.

9. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.

10. (Withdrawn) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves only in a first direction with respect to the neutral position.

11. (Withdrawn) The vector decoupling assembly of claim 10, wherein the motion of the lateral release assembly is at least partially rotational.

12. (Withdrawn) The vector decoupling assembly of claim 10, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.

13. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.

14. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.

### **REMARKS**

Claims 1-14 are pending. Claims 10-14 have been withdrawn. Claims 1-9 have been rejected under 35 USC §102. Claim 1 has been amended, and support for the amendment can be found in at least paragraph 37 of the Application. No new subject matter has been added.

### **Rejections Under 35 U.S.C. §102**

Claims 1-9 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,505,494 to Gertsch. Applicant respectfully traverses these rejections for at least the following reasons.

In Applicant's previous response filed October 8, 2013, Applicant explained that the lower heel assembly in the currently pending claims cannot correspond to element 17 of Gertsch as element 17 is actually a base plate for a lateral release means associated with the *toe ball portion* of a ski boot, rather than the heel portion of a ski boot. Office Action Response dated 10/8/13, p. 5. Furthermore, the upper heel assembly in the currently pending claims cannot correspond to the sole hold-down member 15 of Gertsch for the same reason: element 15 is used to hold down a *toe* portion of a ski boot, and not the heel portion. *See id.* at pp. 5-6. However, in the Office Action dated March 4, 2014, the Examiner once again rejected the claims over Gertsch. In particular, in the Response to Arguments section of the Office Action, the Examiner pointed Applicant's attention to column 6, lines 59-68 and column 7, line 1 of Gertsch as allegedly showing that Gertsch's lower heel assembly 17 and the lateral release means 16 are associated with the heel portion of a ski boot.

Applicant respectfully disagrees that the cited portions of Gertsch are associated with the heel portion of a ski boot. However, to expedite prosecution, Applicant has amended claim 1 to further clarify that the claimed upper heel assembly is for engaging with the heel portion of a ski boot. In particular, claim 1 now requires that the upper heel assembly comprise "an upper heel housing that is configured to compress a heel portion of a ski boot downward." Applicant submits that the cited portions of Gertsch do not disclose the upper heel assembly as currently claimed.

FIG. 3 is a perspective view of the device. It shows a handle (1) with a trigger (2) and a main body (3). The main body (3) has a curved front face (14) and a rear face (15). The front face (14) features a central opening (16) and a series of small holes (17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29). The rear face (15) has a series of small holes (30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100). The device is shown in a perspective view, with the handle (1) and trigger (2) on the left and the main body (3) on the right.

Gertsch , col. 6, ll. 5-15 (emphasis added).

Furthermore, the portions of Gertsch that Examiner points to in the Response to Arguments section does not disclose the claimed “upper heel housing.” Column 6, lines 59-68 and column 7, line 1 of Gertsch merely disclose that when control cam 29 disengages from the abutment roller 28,

the portion 3b with the toe retainer 14 gets free and moves away from the heel retainer 5 in the longitudinal direction of the plate. Through the movement of the toe retainer 14 away from the heel retainer 5 the ski boot is released. None of this disclosure relates to an “upper heel housing that is configured to compress a heel portion of a ski boot downward.”

For at least the reasons set forth above, Applicant submits that claim 1 is patentable over Gertsch. Claims 2-9 depend from claim 1 and incorporate its limitations, and are therefore patentable for at least the same reasons.



**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant is submitting herewith the required fee for a Request for Continued Examination, as well as the required fee for a one month extension of time, and believes no other fee is due. However, please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 08-0219, under Order No. 2003127.00122US3, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Dated: June 24, 2014

/Donald R Steinberg/  
Donald R. Steinberg  
Registration No.: 37,241  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 2003127.00122US3																															
Application Number 12/984,293-Conf. #2029		Filed January 4, 2011																															
For ALPINE SKI BINDING HEEL UNIT																																	
Art Unit 3618		Examiner B. D. Avery																															
<p>This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.</p> <p>The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: center;">Fee</th> <th style="text-align: center;">Small Entity Fee</th> <th style="text-align: center;">Micro Entity Fee</th> <th style="text-align: center;"></th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))</td> <td style="text-align: center;">\$200</td> <td style="text-align: center;">\$100</td> <td style="text-align: center;">\$50</td> <td style="text-align: center;">\$ 100.00</td> </tr> <tr> <td><input type="checkbox"/> Two months (37 CFR 1.17(a)(2))</td> <td style="text-align: center;">\$600</td> <td style="text-align: center;">\$300</td> <td style="text-align: center;">\$150</td> <td style="text-align: center;">\$</td> </tr> <tr> <td><input type="checkbox"/> Three months (37 CFR 1.17(a)(3))</td> <td style="text-align: center;">\$1,400</td> <td style="text-align: center;">\$700</td> <td style="text-align: center;">\$350</td> <td style="text-align: center;">\$</td> </tr> <tr> <td><input type="checkbox"/> Four months (37 CFR 1.17(a)(4))</td> <td style="text-align: center;">\$2,200</td> <td style="text-align: center;">\$1,100</td> <td style="text-align: center;">\$550</td> <td style="text-align: center;">\$</td> </tr> <tr> <td><input type="checkbox"/> Five months (37 CFR 1.17(a)(5))</td> <td style="text-align: center;">\$3,000</td> <td style="text-align: center;">\$1,500</td> <td style="text-align: center;">\$750</td> <td style="text-align: center;">\$</td> </tr> </tbody> </table> <p><input checked="" type="checkbox"/> Applicant asserts small entity status. See 37 CFR 1.27.</p> <p><input type="checkbox"/> Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.</p> <p><input type="checkbox"/> A check in the amount of the fee is enclosed.</p> <p><input checked="" type="checkbox"/> Payment by credit card. <del>Form PTO-2038</del> is attached.</p> <p><input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219.</p> <p><input checked="" type="checkbox"/> Payment made via EFS-Web.</p> <p><b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number 37,241.</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number _____.</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p style="text-align: center;">_____ Signature</p> <p style="text-align: center;">Donald R. Steinberg Typed or printed name</p> </div> <div style="width: 45%;"> <p style="text-align: center;">_____ Date</p> <p style="text-align: center;">June 24, 2014</p> <p style="text-align: center;">_____ Telephone Number</p> <p style="text-align: center;">(617) 526-6000</p> </div> </div> <p><b>NOTE:</b> This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.</p> <p><input type="checkbox"/> *Total of 1 forms are submitted.</p>					Fee	Small Entity Fee	Micro Entity Fee		<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ 100.00	<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$	<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$	<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$	<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$
	Fee	Small Entity Fee	Micro Entity Fee																														
<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ 100.00																													
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<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$																													
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$																													

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875				Application or Docket Number <b>12/984,293</b>		Filing Date <b>01/04/2011</b>		<input type="checkbox"/> To be Mailed				
<b>ENTITY:</b> <input type="checkbox"/> LARGE <input checked="" type="checkbox"/> SMALL <input type="checkbox"/> MICRO												
<b>APPLICATION AS FILED – PART I</b>												
(Column 1)		(Column 2)										
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)				
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A						
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A						
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A						
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*		X \$ =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*		X \$ =						
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))												
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL						
<b>APPLICATION AS AMENDED – PART II</b>												
(Column 1)		(Column 2)		(Column 3)								
<b>AMENDMENT</b>	<b>06/24/2014</b>		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		* 14		Minus ** 20		=		X \$ =			
	Independent (37 CFR 1.16(h))		* 1		Minus *** 3		=		X \$ =			
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE						
(Column 1)		(Column 2)		(Column 3)								
<b>AMENDMENT</b>			CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		*		Minus **		=		X \$ =			
	Independent (37 CFR 1.16(h))		*		Minus ***		=		X \$ =			
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE						
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										LIE /WANDA ANTHONY/		

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**  
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	03/04/2014		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 03/04/2014	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptopairs@wilmerhale.com

<b>Office Action Summary</b>	<b>Application No.</b> 12/984,293	<b>Applicant(s)</b> HOWELL, RICHARD J.	
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618	<b>AIA (First Inventor to File) Status</b> No

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 10/8/13.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.

4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims\***

5) ☒ Claim(s) 1-14 is/are pending in the application.  
5a) Of the above claim(s) 10-14 is/are withdrawn from consideration.

6) ☐ Claim(s) \_\_\_\_ is/are allowed.

7) ☒ Claim(s) 1-9 is/are rejected.

8) ☐ Claim(s) \_\_\_\_ is/are objected to.

9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

**Application Papers**

10) ☐ The specification is objected to by the Examiner.

11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**

a) ☐ All    b) ☐ Some\*\*    c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)  
Paper No(s)/Mail Date \_\_\_\_.

3) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.

4) ☐ Other: \_\_\_\_.

The present application is being examined under the pre-AIA first to invent provisions.

Claims 10-14 are withdrawn from consideration as being directed to a non-elected invention.

An action on the merits of claims 1-9 follows.

### DETAILED ACTION

#### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gertsch (US Patent 4,505,494).

Gertsch teaches a vector decoupling assembly for separating and isolating two or more force vectors (the first being a force from a forward fall and the second being the force from a torsion fall) applied to a safety binding (14) securing a heel portion of a ski boot to a ski (1), including: a lower heel assembly (17) attached to the ski (1); an upper heel assembly (pin 18) coupled to the lower heel assembly and having a lateral release assembly (16) for applying lateral securing pressure (via spring 21) to the ski boot; a linkage element (19) fixedly attached to the lateral release assembly (16); wherein the linkage assembly (19), a first surface defined by slot (26) and a second surface defined by the opening for pin (25) cooperate to limit motion of the lateral release assembly (16) to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski (1). Regarding **claim 2**, the first surface and the second surface are substantially parallel to one another as shown in Figure 1.

Regarding **claim 3**, the first surface and the second surface cooperate to limit motion of the linkage element (19) to the longitudinal and horizontal plane of the ski (1).

Regarding **claim 4**, the lateral release assembly (16) is maintained in a predetermined neutral position in the absence of force vectors applied to the vector decoupling assembly. Regarding **claim 5**, the lateral release assembly moves in both a first direction (left) and a second direction (right) with respect to the neutral position as clearly shown in Figure 6. Regarding **claim 6**, the motion of the lateral release assembly is at least partially rotational based on the movement of the second surface.

Regarding **claim 7**, a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral. Regarding **claims 8 and 9**, a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear and non-linear in as much as applicant's because the assembly of Gertsch is laterally released during a torsion fall which involves twisting which is linear and non-linear.

### ***Response to Arguments***

2. Applicant's arguments filed October 8, 2013 have been fully considered but they are not persuasive.

3. On page 5, applicant argues "The Examiner identifies element 17 of Gertsch as the lower heel assembly of claim 1. Element 17, however, is actually a base plate for a lateral release means associated with the toe ball portion of a ski boot, rather than the heel assembly" and "While Gertsch describes element 16 as a lateral release means, the Gertsch figures and text clearly describe this lateral release means as associated

with toe retainer means rather than the upper heel assembly...." Contrary to applicant's argument, the lower heel assembly 17 and the lateral release means 16 are both also associated with the heel portion of a ski boot via heel retainer 5, as stated in col. 6, lines 59-68 and col. 7, line 1.

4. Applicant's recitation of a "a lower heel assembly" and "an upper heel assembly" in claim 1 fails to preclude a rejection in view of Gertsch because applicant has failed to define any distinguishing structure. It is further noted that applicant's use of the term "assembly" is extremely broad and merely requires a number of parts associated with a heel.

5. Applicant argues that the linkage assembly (housing19), the slot (guide 26) and the pin 25 of Gertsch "do not limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski." The Examiner disagrees because the slot (guide 26) is designed to permit limited play of the pin 25 in the longitudinal direction of the ski. Note the teaching of "the elastic range limit" in col. 7, lines 8-10.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver, can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bridget Avery/  
Examiner, Art Unit 3618

/J. ALLEN SHRIVER II/

Application/Control Number: 12/984,293

Page 6

Art Unit: 3618

Supervisory Patent Examiner, Art Unit 3618

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	796	"280"/\$.ccls. and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/12:16:51
S2	687	S1 and (lateral\$ or horizontal\$ or vector\$)	USPAT	OR	OFF	2006/10/12:16:50
S3	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/12:16:51
S4	455	S3 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
S5	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/16:10:56
S6	455	S5 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
S7	395	S6 and (lateral or horizontal)	USPAT	OR	OFF	2006/10/16:10:57
S8	334	S6 and lateral	USPAT	OR	OFF	2006/10/16:10:57
S9	177	S6 and (lateral with release)	USPAT	OR	OFF	2006/10/16:10:58
S10	129	S6 and (lateral near4 release)	USPAT	OR	OFF	2006/10/16:10:58
S11	1	("4070034").PN.	USPAT	OR	OFF	2006/12/19:04:08
S12	2	((("4070034") or ("3734522"))).PN.	USPAT	OR	OFF	2006/12/19:04:09
S13	0	("skiandheelandlateral").PN.	USPAT	OR	OFF	2007/03/26:17:50
S14	2059	ski and heel and lateral	USPAT	OR	OFF	2007/03/26:17:50
S15	1242	"280"/\$.ccls. and (ski and heel and lateral)	USPAT	OR	OFF	2007/03/26:17:51
S16	1282	"280"/\$.ccls. and (ski and heel and (lateral adj "2" release))	USPAT	OR	OFF	2007/03/26:17:51
S17	166	(280/629).CCLS.	USPAT	OR	OFF	2007/07/09:14:21
S18	115	S17 and release	USPAT	OR	OFF	2007/07/09:14:22
S19	15	S17 and release with horizontal	USPAT	OR	OFF	2007/07/09:14:22
S20	15	S17 and (release with horizontal)	USPAT	OR	OFF	2007/07/09:14:25
S21	6	S20 and heel	USPAT	OR	OFF	2007/07/09:14:25
S22	1293	((280/632) or (280/634) or (280/618) or	USPAT	OR	OFF	2010/09/26:

		(280/624) or (280/625) or (280/626) or (280/627)).CCLS.				21:50
S23	476	S22 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/26 21:50
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S25	31	US-2676813-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3727932-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-4065151-\$.DID. OR US-4264088-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-7225104-\$.DID. OR US-4553772-\$.DID. OR US-4753452-\$.DID. OR US-20020101063-\$.DID. OR US-4070034-\$.DID. OR US-4052086-\$.DID. OR US-3992032-\$.DID. OR US-3825273-\$.DID. OR US-3773344-\$.DID. OR US-3734522-\$.DID.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/09/27 17:11
S26	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:29
S27	0	("6nots23").PN.	USPAT; USOCR	OR	OFF	2010/09/27 17:30
S28	1293	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2010/09/27 17:30
S29	476	S28 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/27 17:30
S30	104	S26 not S29	USPAT	OR	OFF	2010/09/27 17:30
S31	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:34
S35	49	US-2676813-\$.DID. OR US-20020101063-\$.DID. OR US-3578350-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3620545-\$.DID. OR US-3695625-\$.DID. OR US-3727932-\$.DID. OR US-3734520-\$.DID. OR US-3734522-\$.DID. OR US-3773344-\$.DID. OR US-3825273-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-3992032-\$.DID. OR US-7915705-\$.DID. OR US-4052086-\$.DID. OR US-4065151-\$.DID. OR US-4070034-\$.DID. OR US-4111453-\$.DID. OR US-4183549-\$.DID. OR US-4264088-\$.DID. OR US-4266806-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-4444413-\$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 13:37

		OR US-4449731-\$.DID. OR US-4451059-\$.DID. OR US-4466634-\$.DID. OR US-4475743-\$.DID. OR US-4489956-\$.DID. OR US-4553772-\$.DID. OR US-4602804-\$.DID. OR US-4625991-\$.DID. OR US-4753452-\$.DID. OR US-4758017-\$.DID. OR US-5160159-\$.DID. OR US-7887084-\$.DID.				
S36	47	("20020101063"   "2676813"   "3578350"   "3606370"   "3610650"   "3620545"   "3695625"   "3727932"   "3734520"   "3734522"   "3773344"   "3825273"   "3865388"   "3897076"   "3902728"   "3905613"   "3909029"   "3936062"   "3992032"   "4052086"   "4065151"   "4070034"   "4111453"   "4183549"   "4264088"   "4266806"   "4268064"   "4286801"   "4288094"   "4288095"   "4294461"   "4307898"   "4429896"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4553772"   "4602804"   "4625991"   "4753452"   "4758017"   "5160159").PN. OR ("7887084").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 13:48
S37	160	("3129951"   "3317217"   "3325178"   "3326567"   "3351354"   "3366394"   "3408087"   "3432180"   "3473817"   "3497230"   "3527468"   "3529845"   "3529846"   "3550996"   "3554571"   "3554572"   "3578350"   "3580597"   "3594015"   "3604720"   "3606369"   "3608918"   "3610650"   "3620544"   "3620545"   "3625532"   "3675937"   "3727935"   "3733082"   "3734520"   "3762735"   "3778073"   "3820804"   "3830510"   "3836163"   "3876219"   "3909023"   "3933363"   "3937480"   "3944237"   "3950001"   "3989273"   "3989274"   "4022493"   "4033603"   "4060257"   "4103930"   "4111453"   "4165883"   "4183549"   "4188045"   "4190264"   "4214773"   "4307895"   "4421341"   "4444413"   "4489956"   "4533155"   "4607859"   "4624473"   "4625991"   "4681338"   "4773669"   "5024457"   "RE26670").PN. OR ("3578350"   "3620545"   "3695625"   "3734520"   "4111453"   "4183549"   "4266806"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4602804"   "4625991"   "4758017"   "5160159").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 14:01
S38	1	"12984293"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/12 13:08
S39	1322	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2012/06/12 14:16


S40	367	S39 and ((horizontal or lateral) with release)	USPAT	OR	OFF	2012/06/12 14:16
S41	245	S39 and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:16
S42	189	S39 and heel and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:17
S43	2	"20030107352"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/14 11:20
S44	1336	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2013/03/25 13:08
S45	555	S44 and ((lateral or side) with (pressure or force))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
S46	418	S45 and heel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
S47	398	S45 and heel and (boot or footwear)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:10
S48	356	S45 and heel and (boot or footwear) and (release or releasing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:11
S49	292	S45 and heel and (boot or footwear) and ((side or lateral) same (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
S50	241	S45 and heel and (boot or footwear) and ((side or lateral) with (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
S51	67	S45 and heel and (boot or footwear) and ((side or lateral) with (release or releasing))	US-PGPUB; USPAT;	OR	ON	2013/03/25 13:22

		with (limit or limited or predetermined))	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S52	6	"12001436"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/03 13:53
S53	2	("7887084").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/02/03 13:55
S54	43	"280"/\$.ccls. and (ski and "heel assembly")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/06 12:20

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S32	0	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	UPAD	OR	OFF	2010/09/27 17:13
S33	0	(280/628).CCLS.	UPAD	OR	OFF	2010/09/27 17:34
S34	322	280/628	USPAT; UPAD	OR	OFF	2010/09/27 17:35

**2/ 10/ 2014 3:29:32 AM****C:\Users\bavery\Documents\EAST\Workspaces\12984293.wsp**

<b>Search Notes</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
280	618, 624, 625, 626, 627, 628, 62, 632, 634	6/6/11	BA
search	updated	6/25/12	BA
search	updated	3/25/13	BA
search	updated	2/5/14	BA

SEARCH NOTES		
Search Notes	Date	Examiner

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	11/08/2013		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 11/08/2013	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptopairs@wilmerhale.com

<b>NOTICE OF IMPROPER REQUEST FOR CONTINUED EXAMINATION (RCE)</b>	<b>Application No.</b> 12/984,293	<b>Applicant(s)</b> HOWELL, RICHARD J.	
		<b>Art Unit</b> 3600	<b>Date Mailed:</b>

The request for continued examination (RCE) under 37 CFR 1.114 filed on 08 October, 2013 is improper for reason(s) indicated below:

1. ☐ Continued examination under 37 CFR 1.114 does not apply to an application for a design patent. Applicant may wish to consider filing a continuing application under 37 CFR 1.53(b) or a CPA under 37 CFR 1.53(d). An RCE cannot be treated as a CPA.
2. ☐ Continued examination under 37 CFR 1.114 does not apply to an application that was filed before June 8, 1995. Applicant may wish to consider filing a continuing application under 37 CFR 1.53(b).
3. ☒ Continued examination under 37 CFR 1.114 does not apply to an application unless prosecution in the application is closed. If the RCE was accompanied by a reply to a non-final Office action, the reply will be entered and considered under 37 CFR 1.111. If the RCE was not accompanied by a reply, the time period set forth in the last Office action continues to run from the mailing date of that action.
4. ☐ The request was not filed before payment of the issue fee, and no petition under 37 CFR 1.313 was granted. If this application has not yet issued as a patent, applicant may wish to consider filing either a petition under 37 CFR 1.313 to withdraw this application from issue, or a continuing application under 37 CFR 1.53(b).
5. ☐ The request was not filed before abandonment of the application. The application was abandoned, or proceedings terminated on \_\_\_\_\_. Applicant may wish to consider filing a petition under 37 CFR 1.137 to revive this abandoned application.
6. ☐ The request was not accompanied by the fee set forth in 37 CFR 1.17(e) as required by 37 CFR 1.114. Since the application is not under appeal, the time period set forth in the final Office action or notice of allowance continues to run from the mailing date of that action or notice.
7. ☐ The request was not accompanied by a submission as required by 37 CFR 1.114. Since the application is not under appeal, the time period set forth in the final Office action or notice of allowance continues to run from the mailing date of that action or notice.

**Note:** A continued prosecution application (CPA) under 37 CFR 1.53(d) cannot be filed in a utility or plant application. A CPA filed in a utility or plant application that has a filing date **on or after June 8, 1995** will be treated as an RCE under 37 CFR 1.114. The request for a CPA in the instant application, however, has been treated as an improper RCE for the reason(s) indicated above.

***A copy of this Notice MUST be returned with the reply.***

Direct any questions concerning this notice to

/SHANDA ROSS/, Technology Center 3600

Telephone Number: (571)272-6621

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Richard J. HOWELL Confirmation No.: 2029  
Application No.: 12/984,293 Art Unit: 3618  
Filed: January 4, 2011 Examiner: B. D. Avery  
Title: ALPINE SKI BINDING HEEL

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR REFUND**

On April 8, 2013, an Office Action issued in the above-referenced application. The cover page designated the Office Action as non-final, while paragraph 3 of the Office stated that it was Final. In an abundance of caution, the Applicant filed an RCE along with the Response filed on October 8, 2013.

On November 8, 2013, Applicant received a Notice of Improper Request for Continued Examination. Since the Examiner has determined that the Office Action was intended to be non-final, Applicant hereby requests a refund for the RCE charge incurred on October 9, 2013 in the amount of \$850.00 in the above-referenced application.

Respectfully submitted,

Dated: November 26, 2013

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

Electronic Acknowledgement Receipt	
<b>EFS ID:</b>	17503126
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL UNIT
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./C. Bates
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	26-NOV-2013
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	10:41:02
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	122US3_Notice_of_Improper_RCE.PDF	81599 2d123b35d19e045ab7ae065ef90e1223fe96e06f	no	2

### Warnings:

### Information:

2	Refund Request	122US3_Request_for_Refund. PDF	77482  ccfbd7260d3596aed9fc338a07abe924f8bb a121	no	1
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			159081		
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483 7590 WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 11/08/2013	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptpairs@wilmerhale.com

<b>NOTICE OF IMPROPER REQUEST FOR CONTINUED EXAMINATION (RCE)</b>	<b>Application No.</b> 12/984,293	<b>Applicant(s)</b> HOWELL, RICHARD J.	
		<b>Art Unit</b> 3600	<b>Date Mailed:</b>

The request for continued examination (RCE) under 37 CFR 1.114 filed on 08 October, 2013 is improper for reason(s) indicated below:

1. ☐ Continued examination under 37 CFR 1.114 does not apply to an application for a design patent. Applicant may wish to consider filing a continuing application under 37 CFR 1.53(b) or a CPA under 37 CFR 1.53(d). An RCE cannot be treated as a CPA.
2. ☐ Continued examination under 37 CFR 1.114 does not apply to an application that was filed before June 8, 1995. Applicant may wish to consider filing a continuing application under 37 CFR 1.53(b).
3. ☒ Continued examination under 37 CFR 1.114 does not apply to an application unless prosecution in the application is closed. If the RCE was accompanied by a reply to a non-final Office action, the reply will be entered and considered under 37 CFR 1.111. If the RCE was not accompanied by a reply, the time period set forth in the last Office action continues to run from the mailing date of that action.
4. ☐ The request was not filed before payment of the issue fee, and no petition under 37 CFR 1.313 was granted. If this application has not yet issued as a patent, applicant may wish to consider filing either a petition under 37 CFR 1.313 to withdraw this application from issue, or a continuing application under 37 CFR 1.53(b).
5. ☐ The request was not filed before abandonment of the application. The application was abandoned, or proceedings terminated on \_\_\_\_\_. Applicant may wish to consider filing a petition under 37 CFR 1.137 to revive this abandoned application.
6. ☐ The request was not accompanied by the fee set forth in 37 CFR 1.17(e) as required by 37 CFR 1.114. Since the application is not under appeal, the time period set forth in the final Office action or notice of allowance continues to run from the mailing date of that action or notice.
7. ☐ The request was not accompanied by a submission as required by 37 CFR 1.114. Since the application is not under appeal, the time period set forth in the final Office action or notice of allowance continues to run from the mailing date of that action or notice.

**Note:** A continued prosecution application (CPA) under 37 CFR 1.53(d) cannot be filed in a utility or plant application. A CPA filed in a utility or plant application that has a filing date **on or after June 8, 1995** will be treated as an RCE under 37 CFR 1.114. The request for a CPA in the instant application, however, has been treated as an improper RCE for the reason(s) indicated above.

***A copy of this Notice MUST be returned with the reply.***

Direct any questions concerning this notice to

/SHANDA ROSS/, Technology Center 3600

Telephone Number: (571)272-6621

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# **REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL** **(Submitted Only via EFS-Web)**

Application Number	12984293	Filing Date	2011-01-04	Docket Number (if applicable)	2003127.00122US3	Art Unit	3618
First Named Inventor	Richard J. HOWELL			Examiner Name	B. D. Avery		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

## **SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

☐ Other \_\_\_\_\_

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☒ Other \_\_\_\_\_  
 Extension of Time \_\_\_\_\_

## **MISCELLANEOUS**

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other \_\_\_\_\_

## **FEES**

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**  
 The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to  
 Deposit Account No 080219

## **SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

☒ Patent Practitioner Signature

☐ Applicant Signature



Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Signature of Registered U.S. Patent Practitioner			
Signature	/Ronald R. Demsher/	Date (YYYY-MM-DD)	2013-10-07
Name	Ronald R. Demsher	Registration Number	42478

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL UNIT		

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE AFTER FINAL ACTION UNDER 37 C.F.R. 1.116**

Dear Madam:

**INTRODUCTORY COMMENTS**

In response to the Office Action dated April 8, 2013, finally rejecting claims 1-9, please reconsider the above-identified U.S. patent application in light of the following remarks:

**The pending claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 5 of this paper.

**AMENDMENTS TO THE CLAIMS**

1. (Previously presented) A vector decoupling assembly for separating and isolating two or more force vectors applied to a safety binding securing a heel portion of a ski boot to a ski, comprising:
  - a lower heel assembly attached to the ski;
  - an upper heel assembly coupled to the lower heel assembly and having a lateral release assembly for applying lateral securing pressure to the ski boot;
  - a linkage element fixedly attached to the lateral release assembly;wherein the linkage element, a first surface and a second surface cooperate to limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski.
2. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface are substantially parallel to one another.
3. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface cooperate to limit motion of the linkage element to the longitudinal and horizontal plane of the ski.
4. (Previously presented) The vector decoupling assembly of claim 1, wherein the lateral release assembly is maintained in a predetermined neutral position in the absence of force vectors applied to the vector decoupling assembly.
5. (Previously presented) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves in both a first direction and a second direction with respect to the neutral position.
6. (Previously presented) The vector decoupling assembly of claim 5, wherein the motion of the lateral release assembly is at least partially rotational.

7. (Previously presented) The vector decoupling assembly of claim 5, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.
8. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.
9. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.
10. (Withdrawn) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves only in a first direction with respect to the neutral position.
11. (Withdrawn) The vector decoupling assembly of claim 10, wherein the motion of the lateral release assembly is at least partially rotational.
12. (Withdrawn) The vector decoupling assembly of claim 10, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.
13. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.
14. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a

position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.

### **REMARKS**

This paper is responsive to the non-final Office Action dated April 8, 2013. By this paper, none of the pending claims have been amended.

The Office Action Summary shows this Office Action to be non-final, and the Applicant believes this to be correct. At paragraph 3 of the Office Action, however, the Examiner states that this Office Action is final. In an abundance of caution, the Applicant has filed an RCE along with this response. If the Examiner determines that the Office Action is truly non-final, the Applicant withdraws the RCE and requests a refund.

### ***Claim Rejections - 35 USC § 102***

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gertsch (US Patent 4,505,494). Applicant traverses these rejections for at least the following reasons.

The Examiner identifies element 17 of Gertsch as the lower heel assembly of claim 1. Element 17, however, is actually a base plate for a lateral release means associated with the toe ball portion of a ski boot, rather than the heel assembly:

“Portion 3b forms a foot plate for the toe ball portion of a ski boot and it rests on a rest means which is in the form of a strip 12 with good sliding properties disposed on the upper surface of the ski. The foot plate carries on its upper surface a transversely extending support rail 13 for supporting the ski boot sole. At the forward end of portion 3b a toe retainer means 14 is fixedly mounted which overlaps the ski boot sole with a sole hold-down member 15. The toe retainer means 14 is coupled with a lateral release means 16 mounted on a base plate 17 provided on the ski.” Gertsch col. 6 lines 5-15 (emphasis added).

The elements of Gertsch to which the Examiner refers for remaining claim elements relate to the toe portion of the ski boot rather than the heel portion as recited in the claims.

The Examiner identifies element 15 as the upper heel assembly of claim 1. Element 15, however, is a “sole hold-down member” associated with the toe retainer means, rather than an upper heel assembly:

“At the forward end of portion 3b a toe retainer means 14 is fixedly mounted which overlaps the ski boot sole with a sole hold-down member 15.” Gertsch col. 6 lines 10-13 (emphasis added).

Regarding the claim 1 limitation of “an upper heel assembly . . . having a lateral release assembly for applying lateral securing pressure to the ski boot”, the Examiner identifies Gertsch element 16 as the “lateral release assembly.” While Gertsch describes element 16 as a “lateral release means,” the Gertsch figures and text clearly describe this lateral release means as associated with the “toe retainer means” rather than the upper heel assembly as recited in the claims:

“Portion 3b forms a foot plate for the toe ball portion of a ski boot and it rests on a rest means which is in the form of a strip 12 with good sliding properties disposed on the upper surface of the ski. The foot plate carries on its upper surface a transversely extending support rail 13 for supporting the ski boot sole. At the forward end of portion 3b a toe retainer means 14 is fixedly mounted which overlaps the ski boot sole with a sole hold-down member 15. The toe retainer means 14 is coupled with a lateral release means 16 mounted on a base plate 17 provided on the ski.” Gertsch col. 6 lines 5-15 (emphasis added).

The Examiner identifies element 19 of Gertsch as the linkage element of claim 1. Element 19, however, is a housing containing a piston. Claim 1 further requires “the linkage element, a first surface and a second surface cooperate to limit motion of the lateral release assembly.” For this limitation, the Examiner identifies alleged cooperation of “the linkage assembly (16), a first surface defined by slot (26) and a second surface defined by the opening for pin (25).” According to claim 1, the first of these three cooperating elements is the linkage element, which the Examiner previously identified as Gertsch element 19, not 16. Assuming the Examiner meant for the first element to be 19 rather than 16, these three elements of Gertsch do not limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski, as required by claim 1. Further, as described above, these three elements of Gertsch are part of a toe retention assembly rather than a heel assembly. Claim 1 requires the linkage element to be fixedly attached to the lateral release assembly, which is part of the upper heel assembly.



For at least the reasons set forth above, claim 1 should be allowable. Since claims 2-9 depend from allowable claim 1, those claims should also be allowable. Accordingly, Applicant believes the pending application is in condition for allowance.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 08-0219, under Order No. 2003127.00122US3, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Dated: October 8, 2013

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 2003127.00122US3		
Application Number 12/984,293-Conf. #2029		Filed January 4, 2011		
For ALPINE SKI BINDING HEEL UNIT				
Art Unit 3618		Examiner B. D. Avery		
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application. The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):				
	<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>	
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ 700.00
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$3000	\$1,500	\$750	\$ _____
<input checked="" type="checkbox"/> Applicant asserts small entity status. See 37 CFR 1.27.				
<input type="checkbox"/> Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.				
<input type="checkbox"/> A check in the amount of the fee is enclosed.				
<input checked="" type="checkbox"/> Payment by credit card. <del>Form PTO-2038 is attached.</del>				
<input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account.				
<input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .				
<input checked="" type="checkbox"/> Payment made via EFS-Web.				
<b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
I am the				
<input type="checkbox"/> applicant.				
<input checked="" type="checkbox"/> attorney or agent of record. Registration Number 42,478 .				
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number _____ .				
_____ /Ronald R. Demsher/ Signature		_____ October 8, 2013 Date		
_____ Ronald R. Demsher Typed or printed name		_____ (617) 526-6000 Telephone Number		
<b>NOTE:</b> This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.				
<input type="checkbox"/> *Total of 1 forms are submitted.				

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL UNIT		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Ronald R. Demsher./C. Bates		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Utility under 35 USC 111 (a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 3 months with \$0 paid	2253	1	700	700

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
RCE - 2nd and Subsequent Request	2820	1	850	850
<b>Total in USD (\$)</b>				<b>1550</b>

<b>Electronic Acknowledgement Receipt</b>	
<b>EFS ID:</b>	17065752
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL UNIT
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./C. Bates
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	08-OCT-2013
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	14:04:01
<b>Application Type:</b>	Utility under 35 USC 111(a)

### **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 1550
RAM confirmation Number	373
Deposit Account	080219
Authorized User	DEMSHER, RONALD R
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	122US3_RCE.PDF	697746	no	3
			81a46468083bd3dcc98de08ebef7c31893c454b2		
Warnings:					
Information:					
2		122US3_Response_8Oct2013_2.PDF	111022	yes	7
			49f3bfbdb3b2abb557dac621f2741d962419d4948		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Response After Final Action		1	1	
	Claims		2	4	
	Applicant Arguments/Remarks Made in an Amendment		5	7	
Warnings:					
Information:					
3	Extension of Time	122US3_EOT.PDF	1623643	no	1
			3e180e43e5d3eb110443aeb2c66db9a228ab7f53		
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	31929	no	2
			2049931bb6e4989ad290b17ca72da6589875108d		
Warnings:					
Information:					
Total Files Size (in bytes):			2464340		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875				Application or Docket Number <b>12/984,293</b>		Filing Date <b>01/04/2011</b>		<input type="checkbox"/> To be Mailed	
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ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

### APPLICATION AS FILED – PART I

(Column 1)		(Column 2)				(Column 3)		(Column 4)	
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)			
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A					
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A					
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		X \$	=				
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		X \$	=				
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL					

### APPLICATION AS AMENDED – PART II

(Column 1)		(Column 2)		(Column 3)				(Column 4)	
AMENDMENT	10/08/2013	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 14	Minus	** 20	= 0	x \$40 =		0	
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	= 0	x \$210 =		0	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))									
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
TOTAL ADD'L FEE								0	

(Column 1)		(Column 2)		(Column 3)				(Column 4)	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$	=		
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$	=		
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))									
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
TOTAL ADD'L FEE									

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*





WILMERHALE

May 8, 2013

Ronald R. Demsher

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+1 617 526 5000 (f)  
ronald.demsher@wilmerhale.com

Ms. Bridget Avery  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Re: United States Patent App. 12/984,293

Dear Ms. Avery:

I am the attorney of record for the above-referenced application (the "Application"). On March 17, 2013 and May 1, 2013, you received email communications from one of the inventors, Richard J. Howell. I write to clarify and correct Mr. Howell's misstatements regarding the Application and issued U.S. Patent Nos. 7,318,598 and 7,887,084 (the Patents").

First, the Patents and Application referenced by Mr. Howell were assigned by Mr. Howell to KneeBinding, Inc. ("KneeBinding") in 2006 and 2008. The assignments are on file with the U.S. Patent and Trademark Office.

Second, contrary to Mr. Howell's assertions, he has no continuing interest - financial or otherwise - in the Application or the Patents. Mr. Howell assigned all right, title, and interest in the Patents and the Application to KneeBinding. WilmerHale's representation of KneeBinding before the U.S. Patent and Trademark Office does not create a "conflict of interest" with Mr. Howell.

Third, WilmerHale is not "acting adversely against [Mr. Howell] in real-time litigation." WilmerHale is not presently nor has it been in the past a party to any lawsuit or proceeding adverse to Mr. Howell, nor is WilmerHale representing any client in litigation adverse to the interests of Mr. Howell.

Fourth, despite the suggestion by Mr. Howell to the contrary, the Application is allowable. The U.S. Patent and Trademark Office should proceed with its examination without regard to any statements made by Mr. Howell.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Frankfurt London Los Angeles New York Oxford Palo Alto Waltham Washington

WILMERHALE

Ms. Bridget Avery

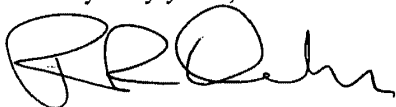
May 8, 2013

Page 2

Finally, WilmerHale's work in connection with the Application is on behalf of KneeBinding, not Mr. Howell. WilmerHale does not represent Mr. Howell.

I am happy to discuss any aspect of the Application or Mr. Howell's communications with you at any time.

Very truly yours,

A handwritten signature in black ink, appearing to read 'RRD' followed by a stylized flourish.

Ronald R. Demsher

RRD:nmo



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	04/08/2013		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 04/08/2013	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptopairs@wilmerhale.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	12/984,293	HOWELL, RICHARD J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BRIDGET AVERY	3618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2013.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-14 is/are pending in the application.
- 5a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-9 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 3) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 4) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gertsch (US Patent 4,505,494).

Gertsch teaches a vector decoupling assembly for separating and isolating two or more force vectors (the first being a force from a forward fall and the second being the force from a torsion fall) applied to a safety binding (14) securing a heel portion of a ski boot to a ski (1), including: a lower heel assembly (17) attached to the ski (1); an upper heel assembly (pin 15) coupled to the lower heel assembly and having a lateral release assembly (16) for applying lateral securing pressure (via spring 21) to the ski boot; a linkage element (19) fixedly attached to the lateral release assembly (16); wherein the linkage assembly (16), a first surface defined by slot (26) and a second surface defined by the opening for pin (25) cooperate to limit motion of the lateral release assembly (16) to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski (1). Regarding **claim 2**, the first surface and the second surface are substantially parallel to one another as shown in Figure 1. Regarding **claim 3**, the first surface and the second surface cooperate to limit motion of the linkage element (19) to the longitudinal and horizontal plane of the ski (1). Regarding **claim 4**, the lateral release assembly (16) is maintained in a predetermined neutral position in the absence of force vectors applied to the vector decoupling assembly. Regarding **claim 5**, the lateral release assembly moves in both a first

direction (left) and a second direction (right) with respect to the neutral position as clearly shown in Figure 6. Regarding **claim 6**, the motion of the lateral release assembly is at least partially rotational based on the movement of the second surface. Regarding **claim 7**, a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral. Regarding **claims 8 and 9**, a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear and non-linear in as much as applicant's because the assembly of Gertsch is laterally released during a torsion fall which involves twisting which is linear and non-linear.

#### ***Response to Arguments***

2. Applicant's arguments with respect to claim 1 has been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

#### ***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 3618

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver, can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bridget Avery/  
Examiner, Art Unit 3618

/J. ALLEN SHRIVER II/  
Supervisory Patent Examiner, Art Unit 3618

<b>Notice of References Cited</b>	Application/Control No. 12/984,293	Applicant(s)/Patent Under Reexamination HOWELL, RICHARD J.	
	Examiner BRIDGET AVERY	Art Unit 3618	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-3,992,032 A	11-1976	Swenson, Glen R.	280/632
*	B	US-4,505,494 A	03-1985	Gertsch, Ulrich	280/618
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**


*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



<b>Search Notes</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
280	618, 624, 625, 626, 627, 628, 62, 632, 634	6/6/11	BA
search	updated	6/25/12	BA
search	updated	3/25/13	BA

SEARCH NOTES		
Search Notes	Date	Examiner

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1336	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).OCLS	USPAT	OR	OFF	2013/03/25 13:08
L2	555	1 and ((lateral or side) with (pressure or force))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
L3	418	2 and heel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:09
L4	398	2 and heel and (boot or footwear)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:10
L5	356	2 and heel and (boot or footwear) and (release or releasing)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:11
L6	292	2 and heel and (boot or footwear) and ((side or lateral) same (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
L7	241	2 and heel and (boot or footwear) and ((side or lateral) with (release or releasing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/03/25 13:14
L8	67	2 and heel and (boot or footwear) and ((side or lateral) with (release or releasing) with (limit or limited or predetermined))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2013/03/25 13:22

			DERWENT; IBM_TDB			
S1	796	"280"/\$.ccls. and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/12 16:51
S2	687	S1 and (lateral\$ or horizontal\$ or vertor\$)	USPAT	OR	OFF	2006/10/12 16:50
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S6	455	S5 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16 10:56
S7	395	S6 and (lateral or horizontal)	USPAT	OR	OFF	2006/10/16 10:57
S8	334	S6 and lateral	USPAT	OR	OFF	2006/10/16 10:57
S9	177	S6 and (lateral with release)	USPAT	OR	OFF	2006/10/16 10:58
S10	129	S6 and (lateral near4 release)	USPAT	OR	OFF	2006/10/16 10:58
S11	1	("4070034").PN.	USPAT	OR	OFF	2006/12/19 04:08
S12	2	((("4070034") or ("3734522"))).PN.	USPAT	OR	OFF	2006/12/19 04:09
S13	0	("skiandheelandlateral").PN.	USPAT	OR	OFF	2007/03/26 17:50
S14	2059	ski and heel and lateral	USPAT	OR	OFF	2007/03/26 17:50
S15	1242	"280"/\$.ccls. and (ski and heel and lateral)	USPAT	OR	OFF	2007/03/26 17:51
S16	1282	"280"/\$.ccls. and (ski and heel and (lateral adj "2" release))	USPAT	OR	OFF	2007/03/26 17:51
S17	166	(280/629).CCLS.	USPAT	OR	OFF	2007/07/09 14:21
S18	115	S17 and release	USPAT	OR	OFF	2007/07/09 14:22
S19	15	S17 and release with horizontal	USPAT	OR	OFF	2007/07/09 14:22
S20	15	S17 and (release with horizontal)	USPAT	OR	OFF	2007/07/09 14:25
S21	6	S20 and heel	USPAT	OR	OFF	2007/07/09 14:25
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S26	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:29
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S37	160	("3129951"   "3317217"   "3325178"   "3326567"   "3351354"   "3366394"   "3408087"   "3432180"   "3473817"   "3497230"   "3527468"   "3529845"   "3529846"   "3550996"   "3554571"   "3554572"   "3578350"   "3580597"   "3594015"   "3604720"   "3606369"   "3608918"   "3610650"   "3620544"   "3620545"   "3625532"   "3675937"   "3727935"   "3733082"   "3734520"   "3762735"   "3778073"   "3820804"   "3830510"   "3836163"   "3876219"   "3909023"   "3933363"   "3937480"   "3944237"   "3950001"   "3989273"   "3989274"   "4022493"   "4033603"   "4060257"   "4103930"   "4111453"   "4165883"   "4183549"   "4188045"   "4190264"   "4214773"   "4307895"   "4421341"   "4444413"   "4489956"   "4533155"   "4607859"   "4624473"   "4625991"   "4681338"   "4773669"   "5024457"   "RE26670").PN. OR ("3578350"   "3620545"   "3695625"   "3734520"   "4111453"   "4183549"   "4266806"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4602804"   "4625991"   "4758017"   "5160159").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 14:01
S38	1	"12984293"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/12 13:08
S39	1322	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2012/06/12 14:16
S40	367	S39 and ((horizontal or lateral) with release)	USPAT	OR	OFF	2012/06/12 14:16
S41	245	S39 and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:16
S42	189	S39 and heel and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:17
S43	2	"20030107352"	US-PGPUB; USPAT; USOCR;	OR	ON	2012/06/14 11:20

## EAST Search History

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
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## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S32	0	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	UPAD	OR	OFF	2010/09/27 17:13
S33	0	(280/628).CCLS.	UPAD	OR	OFF	2010/09/27 17:34
S34	322	280/628	USPAT; UPAD	OR	OFF	2010/09/27 17:35

3/ 25/ 2013 1:58:23 PM

C:\Users\bavery\Documents\EAST\Workspaces\12984293.wsp



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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/984,293	01/04/2011	3618	527	2003127.00122US3	1	1

CONFIRMATION NO. 2029  
CORRECTED FILING RECEIPT



\*OC000000059097577\*

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

Date Mailed: 02/08/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

**Inventor(s)**

Richard J. Howell, Stowe, VT;

**Applicant(s)**

Richard J. Howell, Stowe, VT;

**Assignment For Published Patent Application**

Kneebinding, Inc., Stowe, VT

**Power of Attorney:** The patent practitioners associated with Customer Number 23483

**Domestic Priority data as claimed by applicant**

This application is a CON of 12/001,436 12/11/2007 PAT 7887084  
which is a DIV of 10/780,455 02/17/2004 PAT 7318598  
which claims benefit of 60/448,645 02/18/2003

**Foreign Applications** for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

*Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.*

**If Required, Foreign Filing License Granted:** 01/14/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/984,293**

**Projected Publication Date:** Not Applicable

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

**Title**

ALPINE SKI BINDING HEEL UNIT

**Preliminary Class**

280

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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page 2 of 3



set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

---

### ***SelectUSA***

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

Docket No.: 2003127.00122US3  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL UNIT		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CORRECTED FILING RECEIPT**

Dear Commissioner:

Applicant hereby requests that a corrected Filing Receipt be issued in the above-identified patent application. The official Filing Receipt received by Applicant, an annotated copy of which is attached hereto, has an omission in the title. Please correct the title to read:

Alpine Ski Binding Heel Unit

Applicant herewith submits a Supplemental Application Data Sheet correcting the title.

Applicant additionally requests that all pertinent U.S. Patent and Trademark Office records relating to the subject application be changed to reflect this correction.

Application No.: 12/984,293

Docket No.: 2003127.00122US3

Applicant believes no fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2003127.00122US3 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: January 29, 2013

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY DOCKET NO	TOT CLAIMS	IND CLAIMS
12/984,293	01/04/2011	3618	527	2003127.00122US3	1	1

CONFIRMATION NO. 2029

UPDATED FILING RECEIPT



\*OC000000047418871\*

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

Date Mailed: 05/04/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

**Applicant(s)**

Richard J. Howell, Stowe, VT;

**Assignment For Published Patent Application**

Kneebinding, Inc., Stowe, VT

**Power of Attorney:** The patent practitioners associated with Customer Number 23483

**Domestic Priority data as claimed by applicant**

This application is a CON of 12/001,436 12/11/2007 PAT 7,887,084  
which is a DIV of 10/780,455 02/17/2004 PAT 7,318,598  
which claims benefit of 60/448,645 02/18/2003

**Foreign Applications** (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.)

**If Required, Foreign Filing License Granted:** 01/14/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/984,293**

**Projected Publication Date:** 08/11/2011

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

# COPY

**Title**

ALPINE SKI BINDING HEEL UNIT

**Preliminary Class**

280

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

### LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

page 2 of 3

## COPY

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

## **Supplemental Application Data Sheet**

### **Application Information**

Application number::	<u>12/984,293</u>
Filing Date::	<u>01/04/11</u>
Application Type::	Regular
Subject Matter::	Utility
Suggested classification::	
Suggested Group Art Unit::	3618
CD-ROM or CD-R?::	None
Number of CD disks::	
Number of copies of CDs::	
Sequence submission?::	None
Computer Readable Form (CRF)?::	No
Number of copies of CRF::	
Title::	<del>ALPINE SKI BINDING HEEL</del> <u>ALPINE SKI BINDING HEEL UNIT</u>
Attorney Docket Number::	2003127.00122US3
Request for Early Publication?::	No
Request for Non-Publication?::	No
Suggested Drawing Figure::	1
Total Drawing Sheets::	4
Small Entity?::	Yes
Petition included?::	No

Petition Type::  
Licensed US Govt. Agency::  
Contract or Grant Numbers::  
Secrecy Order in Parent Appl.?:: No

**Applicant Information**

Applicant Authority Type:: Inventor  
Primary Citizenship Country:: US  
Status:: Full Capacity  
Given Name:: Richard  
Middle Name:: J.  
Family Name:: HOWELL  
Name Suffix::  
City of Residence:: Stowe  
State or Province of Residence:: VT  
Country of Residence:: US  
Street of mailing address:: 782 South Main Street  
  
City of mailing address:: Stowe  
State or Province of mailing address:: VT  
Country of mailing address::  
Postal or Zip Code of mailing address:: 05672



**Correspondence Information**

Correspondence Customer Number:: 23483

**Representative Information**

Representative Customer Number:: 23483

**Domestic Priority Information**

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	Continuation of	12/001436	12/11/07
12/001436	Division of	10/780455	02/17/04
10/780455	An application claiming the benefit under 35 USC 119(e)	60/448645	02/18/03

**Foreign Priority Information****Assignee Information**

**Signature:**

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.			
Signature	/Ronald R. Demsher/	Date	January 29, 2013
Name (Print/Type)	Ronald R. Demsher	Registration No. (Attorney/Agent)	42,478

Electronic Acknowledgement Receipt	
<b>EFS ID:</b>	14820249
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./Becky Douglas
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	29-JAN-2013
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	15:51:25
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Corrected Filing Receipt	2013_01_29_122US3_Request CorrFR_USSN_12_984293.PDF	79143  76e1cafe0287b89202791ebabe2ebc63f876 af72	no	2

### Warnings:

### Information:

2	Request for Corrected Filing Receipt	2013_01_29_122US3_Annotated_FR_USSN_12_984293.PDF	3403484 f71b3e635ecd3a32171611b59805ec9142f8da65	no	3
<b>Warnings:</b>					
<b>Information:</b>					
3	Application Data Sheet	2013_01_29_122US3_SupplementalADS_USSN_12_984293.PDF	60914 4b1784b2fd0be62698a377dbbf83c800518eb1c	no	4
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied ADS fillable form					
<b>Total Files Size (in bytes):</b>			3543541		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

### REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL (Submitted Only via EFS-Web)

Application Number	12984293	Filing Date	2011-01-04	Docket Number (if applicable)	2003127.00122US3	Art Unit	3618
First Named Inventor	Richard J. HOWELL			Examiner Name	B. D. Avery		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

#### SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

☐ Other \_\_\_\_\_

☒ Enclosed

☒ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☒ Other \_\_\_\_\_  
Petition for Three Month Extension of Time

#### MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_.  
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other \_\_\_\_\_

#### FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**  
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to  
Deposit Account No 080219

#### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Ronald R. Demsher/	Date (YYYY-MM-DD)	2013-01-09
Name	Ronald R. Demsher	Registration Number	42478

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b>		Docket Number (Optional) 2003127.00122US3																									
Application Number 12/984,293-Conf. #2029		Filed January 4, 2011																									
For ALPINE SKI BINDING HEEL																											
Art Unit 3618		Examiner B. D. Avery																									
<p>This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.</p> <p>The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: center;"><u>Fee</u></th> <th style="width: 15%; text-align: center;"><u>Small Entity Fee</u></th> <th style="width: 30%;"></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> One month (37 CFR 1.17(a)(1))</td> <td style="text-align: center;">\$150</td> <td style="text-align: center;">\$75</td> <td>\$ _____</td> </tr> <tr> <td><input type="checkbox"/> Two months (37 CFR 1.17(a)(2))</td> <td style="text-align: center;">\$570</td> <td style="text-align: center;">\$285</td> <td>\$ _____</td> </tr> <tr> <td><input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))</td> <td style="text-align: center;">\$1,290</td> <td style="text-align: center;">\$645</td> <td>\$ 645.00</td> </tr> <tr> <td><input type="checkbox"/> Four months (37 CFR 1.17(a)(4))</td> <td style="text-align: center;">\$2,010</td> <td style="text-align: center;">\$1,005</td> <td>\$ _____</td> </tr> <tr> <td><input type="checkbox"/> Five months (37 CFR 1.17(a)(5))</td> <td style="text-align: center;">\$2,730</td> <td style="text-align: center;">\$1,365</td> <td>\$ _____</td> </tr> </tbody> </table> <p><input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.</p> <p><input type="checkbox"/> A check in the amount of the fee is enclosed.</p> <p><input checked="" type="checkbox"/> Payment by credit card. <del>Form PTO-2038 is attached.</del></p> <p><input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219 .</p> <p><input checked="" type="checkbox"/> Payment made via EFS-Web.</p> <p><b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration Number 42,478 .</p> <p><input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number _____.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p>_____/Ronald R. Demsher/</p> <p style="text-align: center;">Signature</p> <p>_____ Ronald R. Demsher</p> <p style="text-align: center;">Typed or printed name</p> </div> <div style="width: 45%;"> <p>_____ January 9, 2013</p> <p style="text-align: center;">Date</p> <p>_____ (617) 526-6000</p> <p style="text-align: center;">Telephone Number</p> </div> </div> <p><b>NOTE:</b> This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.</p>					<u>Fee</u>	<u>Small Entity Fee</u>		<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$150	\$75	\$ _____	<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$570	\$285	\$ _____	<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,290	\$645	\$ 645.00	<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,010	\$1,005	\$ _____	<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$2,730	\$1,365	\$ _____
	<u>Fee</u>	<u>Small Entity Fee</u>																									
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$150	\$75	\$ _____																								
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$570	\$285	\$ _____																								
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1,290	\$645	\$ 645.00																								
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$2,010	\$1,005	\$ _____																								
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$2,730	\$1,365	\$ _____																								

<input type="checkbox"/> *Total of 1 forms are submitted.
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CONTINUED EXAMINATION PURSUANT TO 37 C.F.R. 1.114 AND**  
**AMENDMENT**

Dear Madam:

**INTRODUCTORY COMMENTS**

In response to the Final Office Action dated July 9, 2012, finally rejecting claims 1-9. Applicant respectfully request entry of this Amendment that accompanies a Request for Continued Examination with a three-month extension of time attached herewith. Please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 5 of this paper.

**AMENDMENTS TO THE CLAIMS**

1. (Previously presented) A vector decoupling assembly for separating and isolating two or more force vectors applied to a safety binding securing a heel portion of a ski boot to a ski, comprising:
  - a lower heel assembly attached to the ski;
  - an upper heel assembly coupled to the lower heel assembly and having a lateral release assembly for applying lateral securing pressure to the ski boot;
  - a linkage element fixedly attached to the lateral release assembly;wherein the linkage element, a first surface and a second surface cooperate to limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski.
2. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface are substantially parallel to one another.
3. (Previously presented) The vector decoupling assembly of claim 1, wherein the first surface and the second surface cooperate to limit motion of the linkage element to the longitudinal and horizontal plane of the ski.
4. (Currently amended) The vector decoupling assembly of claim 1, wherein the lateral release assembly is maintained in a predetermined neutral position in the absence ~~the~~of force vectors applied to the vector decoupling assembly.
5. (Previously presented) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves in both a first direction and a second direction with respect to the neutral position.
6. (Previously presented) The vector decoupling assembly of claim 5, wherein the motion of

the lateral release assembly is at least partially rotational.

7. (Previously presented) The vector decoupling assembly of claim 5, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.

8. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.

9. (Previously presented) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.

10. (Withdrawn) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves only in a first direction with respect to the neutral position.

11. (Withdrawn) The vector decoupling assembly of claim 10, wherein the motion of the lateral release assembly is at least partially rotational.

12. (Withdrawn) The vector decoupling assembly of claim 10, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.

13. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.

14. (Withdrawn) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.

### **REMARKS**

This paper is responsive to the Office Action dated July 9, 2012. By this paper, claim 4 has been amended, and claims 9 through 14 have been withdrawn. No new matter has been added.

At paragraph 2 of the Office Action, the Examiner withdraws claims 10-14 as being directed to a non-elected invention. Accordingly, the Applicant marks claims 10-14 as withdrawn. Applicant intends to pursue those claims in a Divisional Application.

At paragraph 3 of the Office Action, the Examiner rejects claims 4-9 under 35 U.S.C. §112, second paragraph, as being indefinite. The Applicant amends claim 4 to recite “. . . in the absence of force vectors . . .” rather than “. . . in the absence *the* force vectors . . .” as the Examiner suggests. Accordingly, that rejection should be withdrawn.

At paragraph 5 of the Office Action, the Examiner rejects claims 1-9 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,858,946 to Stritzl et al. (hereinafter ‘Stritzl’). The Applicant disagrees with the Examiner for at least the following reasons.

1. Stritzl does not teach or suggest the claim 1 element, “an upper heel assembly . . . having a lateral release assembly for applying lateral securing pressure to the ski boot” as the Examiner asserts. The Examiner indicates that the locking pin 15a of Stritzl teaches the lateral release assembly, which applies lateral pressure to the ski boot via spring 21 and tread spur 7. However, as Stritzl figures 1 and 2 and col. 3 lines 39 to 44 show, the tread spur 7 does not include any side elements that would enable applying lateral securing pressure to the ski boot. The tread spur 7 is constructed and arranged to provide securing pressure to the back of the ski boot rather than to the sides. (*See, e.g.*, “The tread spur 7 is designed in a known manner to enable the sole support 6 to swing upward in the case of a rearward torsion fall.” 3:39-41, emphasis added).
2. Stritzl does not teach or suggest a linkage element, a first surface and a second surface cooperate to limit motion of the lateral release assembly, as claim 1 requires. The

Examiner asserts that in Stritzl, the locking pin 15 is the linkage element, the base 16a of the bearing block is the first surface and the roller 19 is the second surface. The Applicant disagrees that these three elements of Stritzl cooperate to limit motion of the lateral release assembly (i.e., 15a). Stritzl describes operation of the locking pin 15a at 3:51-62. This text of Stritzl, copied below, describes the pivoting of the heel support once the locking pin 15a is pulled out of the locking fork 16d, but does not teach or suggest any limiting of the locking pin 15a to a particular plane as required by claim 1.

“In the case of a torsion fall of the skier the sole plate 8 is twisted about a pivot axle 4 against the force of the locking spring 25 which acts upon the roller 78. At the same time, the roller 19 rolls along the cam 3a. The roller 78 lifts the sole support portion 6 of heel holder 2 until the release point of the sole support portion 6 has been reached. If the sole plate 8 is sufficiently swung out, the locking pin 15a of the axial member 15 is pulled out from the slot between the two prongs of the locking fork 16d, allowing the heel support 2 to be pivoted about its vertical axial member 61 and providing lateral release of the ski boot.” Stritzl, 3:51-62.

For at least these reasons, Stritzl does not teach or suggest each and every limitation of claim 1, so that claim should be allowable. Claims 2-9 depend from allowable claim 1, so those claims should be allowable.

At least in view of the above amendment and comments, applicant believes the pending application is in condition for allowance. If the Examiner disagrees with the arguments presented above, the Applicant requests a telephone Interview to expedite prosecution.

Applicant encloses the required petition and fee for a Three-Month Extension of Time. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2003127.00122US3 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: January 9, 2013

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Ronald R. Demsher./June Watson		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Utility under 35 USC 111 (a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 3 months with \$0 paid	2253	1	645	645



Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Request for continued examination	2801	1	465	465
<b>Total in USD (\$)</b>				<b>1110</b>

<b>Electronic Acknowledgement Receipt</b>	
<b>EFS ID:</b>	14655050
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./June Watson
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	09-JAN-2013
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	16:23:20
<b>Application Type:</b>	Utility under 35 USC 111(a)

### **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 1110
RAM confirmation Number	3485
Deposit Account	080219
Authorized User	DEMSHER, RONALD R
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)</p>	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	2003127_00122US3_RCE.PDF	697782	no	3
			a35e51e394afddb36872685fee68b36f4ea13a7d		
Warnings:					
Information:					
2	Extension of Time	2003127_00122US3_EOT.PDF	78002	no	1
			7b15ebbe4285fc1ab225a022e869e19ec9f3543		
Warnings:					
Information:					
3		2003127_00122US3_Amendment.PDF	114228	yes	7
			4e71673b97fb43837b5a04cdc115bb3bc80a2e4		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment Submitted/Entered with Filing of CPA/RCE		1	1	
	Claims		2	4	
	Applicant Arguments/Remarks Made in an Amendment		5	7	
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32014	no	2
			b72f1a91372c3674945b89ad46b36f01c7a655a6		
Warnings:					
Information:					
Total Files Size (in bytes):			922026		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>12/984,293</b>		Filing Date <b>01/04/2011</b>		<input type="checkbox"/> To be Mailed		
<b>APPLICATION AS FILED – PART I</b>											
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A		N/A		N/A		N/A		
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A		N/A		N/A		N/A		
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A		N/A		N/A		N/A		
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$	=	OR	X \$	=	X \$	=	X \$	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=	OR	X \$	=	X \$	=	X \$	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.											
<b>APPLICATION AS AMENDED – PART II</b>											
(Column 1)			(Column 2)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT	01/09/2013	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
Total (37 CFR 1.16(i))	*	14	Minus	**	20	=	0	OR	X \$	=	
Independent (37 CFR 1.16(h))	*	1	Minus	***	3	=	0	OR	X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
TOTAL ADD'L FEE											
<b>0</b>											
(Column 1)			(Column 2)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT	Total (37 CFR 1.16(i))	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
Total (37 CFR 1.16(i))	*	14	Minus	**	20	=	0	OR	X \$	=	
Independent (37 CFR 1.16(h))	*	1	Minus	***	3	=	0	OR	X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
TOTAL ADD'L FEE											
<b>0</b>											
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.											
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".											
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	07/09/2012		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 07/09/2012	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptopairs@wilmerhale.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	12/984,293	HOWELL, RICHARD J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BRIDGET AVERY	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-14 is/are pending in the application.
- 5a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-9 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Newly submitted claims 10-14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the structure required to restrict side-to-side movement of the tongue 60a to block lateral heel release in one lateral direction is different from the structure defined in the claim that applicant filed on January 4, 2011 and received an Office Action on June 28, 2011. Accordingly, the search and examination for the invention defined in claims 10-14 would be burdensome.
2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 10-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Applicant's claim recitation "wherein the lateral release assembly is maintained in a predetermined neutral position in the absence the force vectors applied to the vector



decoupling assembly" is unclear and confusing. For the purposes of advance prosecution of the application, the claim will be treated as "wherein the lateral release assembly is maintained in a predetermined neutral position in the absence of force vectors applied to the vector decoupling assembly".

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Stritzl et al. (US Patent 4,858,946).

Stritzl et al. teaches a vector decoupling assembly for separating and isolating two or more force vectors (the first being a force from a forward fall and the second being the force from a torsion fall) applied to a safety binding (2) securing a heel portion of a ski boot to a ski (1), including: a lower heel assembly (8) attached to the ski (1); an upper heel assembly coupled to the lower heel assembly and having a lateral release assembly (locking pin 15a) for applying lateral securing pressure (via spring 21 and tread spur 7) to the ski boot; a linkage element (15) fixedly attached to the lateral release assembly (15a); wherein the linkage assembly (15a), a first surface defined by base (16a) and a second surface defined by roller (19) cooperate to limit motion of the lateral release assembly (15a) to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski (1). It is noted that the roller (19) rolls along a horizontal cam (3a) where the lateral release assembly moves horizontally within a plane with no vertical movement as shown in Figures 1 and 2. Regarding **claim 2**, the first surface (16a) and the second surface (19) are substantially parallel to

one another as shown in Figure 1. Regarding **claim 3**, the first surface (16a) and the second surface (19) cooperate to limit motion of the linkage element (15) to the longitudinal and horizontal plane of the ski (1). Regarding **claim 4**, the lateral release assembly (15a) is maintained in a predetermined neutral position (defined by the center of cam 3a) in the absence of force vectors applied to the vector decoupling assembly. Regarding **claim 5**, the lateral release assembly moves in both a first direction (left) and a second direction (right) with respect to the neutral position as clearly shown in Figure 2. Regarding **claim 6**, the motion of the lateral release assembly is at least partially rotational based on the movement of the second surface (roller 19) and the shape of the horizontal cam (3a). Regarding **claim 7**, a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position because of the shape of the horizontal cam (3a) and because of the pressure spring (21). Regarding **claims 8 and 9**, a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear and non-linear in as much as applicant's because the assembly of Stritzl et al. is laterally released during a torsion fall which involves twisting which is linear and non-linear.

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1 has been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freisinger et al. shows a safety ski binding.

Jungkind shows a safety ski binding having a pivotable sole plate.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver, can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. ALLEN SHRIVER II/  
Supervisory Patent Examiner, Art Unit 3618

/Bridget Avery/

Examiner, Art Unit 3618

<b>Notice of References Cited</b>	Application/Control No. 12/984,293	Applicant(s)/Patent Under Reexamination HOWELL, RICHARD J.	
	Examiner BRIDGET AVERY	Art Unit 3618	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,732,405 A	03-1988	Freisinger et al.	280/634
*	B	US-4,858,946 A	08-1989	Stritzl et al.	280/618
*	C	US-5,199,736 A	04-1993	Jungkind, Roland	280/618
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			


**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**


*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b><i>Index of Claims</i></b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant				<input type="checkbox"/> CPA				<input type="checkbox"/> T.D.				<input type="checkbox"/> R.1.47			
CLAIM		DATE													
Final	Original	06/07/2011	07/02/2012												
	1	✓	✓												
	2		✓												
	3		✓												
	4		✓												
	5		✓												
	6		✓												
	7		✓												
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	9		✓												
	10		✓												
	11		✓												
	12		✓												
	13		✓												
	14		✓												

<b>Search Notes</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

SEARCHED			
Class	Subclass	Date	Examiner
280	618, 624, 625, 626, 627, 628, 62, 632, 634	6/6/11	BA
search	updated	6/25/12	BA

SEARCH NOTES		
Search Notes	Date	Examiner

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	796	"280"/\$.ccls. and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/12:16:51
S2	687	S1 and (lateral\$ or horizontal\$ or vector\$)	USPAT	OR	OFF	2006/10/12:16:50
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S4	455	S3 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
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S6	455	S5 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16:10:56
S7	395	S6 and (lateral or horizontal)	USPAT	OR	OFF	2006/10/16:10:57
S8	334	S6 and lateral	USPAT	OR	OFF	2006/10/16:10:57
S9	177	S6 and (lateral with release)	USPAT	OR	OFF	2006/10/16:10:58
S10	129	S6 and (lateral near4 release)	USPAT	OR	OFF	2006/10/16:10:58
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S13	0	("skiandheelandlateral").PN.	USPAT	OR	OFF	2007/03/26:17:50
S14	2059	ski and heel and lateral	USPAT	OR	OFF	2007/03/26:17:50
S15	1242	"280"/\$.ccls. and (ski and heel and lateral)	USPAT	OR	OFF	2007/03/26:17:51
S16	1282	"280"/\$.ccls. and (ski and heel and (lateral adj "2" release))	USPAT	OR	OFF	2007/03/26:17:51
S17	166	(280/629).CCLS.	USPAT	OR	OFF	2007/07/09:14:21
S18	115	S17 and release	USPAT	OR	OFF	2007/07/09:14:22
S19	15	S17 and release with horizontal	USPAT	OR	OFF	2007/07/09:14:22
S20	15	S17 and (release with horizontal)	USPAT	OR	OFF	2007/07/09:14:25
S21	6	S20 and heel	USPAT	OR	OFF	2007/07/09:14:25
S22	1293	((280/632) or (280/634) or (280/618) or	USPAT	OR	OFF	2010/09/26:



		(280/624) or (280/625) or (280/626) or (280/627)).CCLS.				21:50
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S28	1293	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2010/09/27 17:30
S29	476	S28 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/27 17:30
S30	104	S26 not S29	USPAT	OR	OFF	2010/09/27 17:30
S31	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:34
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S38	1	"12984293"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/12 13:08
S39	1322	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2012/06/12 14:16

## EAST Search History

S40	367	S39 and ((horizontal or lateral) with release)	USPAT	OR	OFF	2012/06/12 14:16
S41	245	S39 and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:16
S42	189	S39 and heel and ((horizontal or lateral) adj6 release)	USPAT	OR	OFF	2012/06/12 14:17
S43	2	"20030107352"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2012/06/14 11:20

7/ 2/ 2012 5:13:55 PM

C:\Users\bavery\Documents\EAST\Workspaces\12984293.wsp

Docket No.: 2003127.00122US3  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	B. D. Avery
Title:	ALPINE SKI BINDING HEEL		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. 1.111**

Dear Sir:

**INTRODUCTORY COMMENTS**

In response to the Office Action dated June 28, 2011, please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 5 of this paper.

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended) A vector decoupling assembly for separating and isolating two or more force vectors applied to a safety binding securing a heel portion of a ski boot to a ski, comprising:
  - a lower heel assembly attached to the ski;
  - an upper heel assembly coupled to the lower heel assembly and having a lateral release assembly for applying lateral securing pressure to the ski boot;
  - a linkage element fixedly attached to the lateral release assembly;wherein the linkage element, ~~the~~ a first surface and ~~the~~ a second surface cooperate to limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski.
2. (New) The vector decoupling assembly of claim 1, wherein the first surface and the second surface are substantially parallel to one another.
3. (New) The vector decoupling assembly of claim 1, wherein the first surface and the second surface cooperate to limit motion of the linkage element to the longitudinal and horizontal plane of the ski.
4. (New) The vector decoupling assembly of claim 1, wherein the lateral release assembly is maintained in a predetermined neutral position in the absence the force vectors applied to the vector decoupling assembly.
5. (New) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves in both a first direction and a second direction with respect to the neutral position.
6. (New) The vector decoupling assembly of claim 5, wherein the motion of the lateral release assembly is at least partially rotational.

7. (New) The vector decoupling assembly of claim 5, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.
8. (New) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.
9. (New) The vector decoupling assembly of claim 7, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is non-linear.
10. (New) The vector decoupling assembly of claim 4, wherein the lateral release assembly moves only in a first direction with respect to the neutral position.
11. (New) The vector decoupling assembly of claim 10, wherein the motion of the lateral release assembly is at least partially rotational.
12. (New) The vector decoupling assembly of claim 10, wherein a force required to move the lateral release assembly increases as the lateral release assembly moves away from the neutral position.
13. (New) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to move the lateral release assembly is linear.
14. (New) The vector decoupling assembly of claim 12, wherein a relationship between a position of the lateral release assembly with respect to the neutral position and the force required to

Application No. 12/984,293  
Amendment dated December 20, 2011  
Reply to Office Action of June 28, 2011

Docket No.: 2003127,00122US3

move the lateral release assembly is non-linear.

### **REMARKS**

This paper is responsive to the non-final Office Action dated June 28, 2011. Claim 1 has been amended. Claims 2 through 12 have been added. All amendments are supported by the specification as filed. No new matter has been added.

At paragraph 1 of the Office Action, the Examiner rejects claim 1 under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner identifies two instances of insufficient antecedent basis. Accordingly, Applicant amends claim 1 to recite “a first surface” in place of “the first surface.” Similarly, Applicant amends claim 1 to recite “a second surface” in place of “the second surface. With this amendment, the rejection is no longer proper and should be withdrawn.

At paragraph 4 of the Office Action, the Examiner rejects claim 1 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,165,883 (Weigl). The Applicant traverses this rejection for at least the following reasons.

Claim 1 requires that “the linkage element, the first surface and the second surface cooperate to limit motion of the lateral release assembly to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski”. The Applicant submits that Weigl does not limit motion of a lateral release assembly to any plane, let alone to a plane defined by the longitudinal and horizontal axes of the ski.

At paragraph 4 of the Office Action (top of page 3), the Examiner identifies the claim limitation of “lateral release assembly” as “housing 17, lever 27, spring 19 and locking element 9” from Weigl (e.g., from Figure 4 of Weigl). Examiner further identifies the claim limitation of “lower heel assembly” as “support plate 4” and “holding part 7”.

Weigl teaches that the assembly of components identified as the lateral release assembly (9, 17, 19 and 27) is coupled to the lower heel assembly (4 and 7) through the connection of the locking



element 9 to the holding part 7 (see Figure 4). Specifically, Weigl describes the following at column 4, lines 20-24:

“The holding part 7 has an approximately Z-shaped constructed member extending upwardly from the support plate 4. The Z-shaped member has a recess 8 therein for receiving the stem of a mushroom-shaped locking element 9. The development of the holding part 7 is furthermore recognizable by also looking at the embodiment according to FIGS. 9 and 10.”

A careful evaluation of the locking element 9 as depicted in Weigl Figure 4 and Figures 6 through 10 clearly shows that the shape of locking element 9 where it contacts the holding part 7 allows for not only up and down movement but also side to side movement and any combination thereof. In other words, the locking element 9 allows movement within three spatial dimensions of the lateral release assembly (9, 17, 19 and 27) and clearly does not limit the lateral release assembly to a plane defined by the longitudinal and horizontal axes of the ski (i.e., the ski's longitudinal and horizontal plane). Thus, Weigl does not teach or suggest all of the elements of claim 1, so this rejection is improper and should be withdrawn.

Further, the Examiner identifies Weigl reference numbers 22 (bearing block), 27a (enlarged hole or guideway) and 8 (recess in holding part 7) as the linkage element, the first surface and the second surface, respectively, of claim 1. However, it is unclear how the bearing block 22, the enlarged hole or guideway 27a and the recess 8 cooperate to limit motion of the lateral release assembly to within a plane. As described above, motion of the lateral release assembly is not limited to within a plane for the Weigl device.

For at least these reasons, claim 1 should be allowable. Applicant further adds claims 1 through 12, which all depend from base claim 1, either directly or through intervening claims. All new claims are supported throughout the specification as-filed. For example, claims 2, 3 – see FIG. 2; claim 4 – see FIGS. 3 and 4; claims 5-12 – see paragraphs [0048] through [0059].

Application No. 12/984,293  
Amendment dated December 20, 2011  
Reply to Office Action of June 28, 2011

Docket No.: 2003127.00122US3

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant encloses the required petition and fee for a Three-Month Extension of Time. Applicant believes that no other fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 2003127.00122US3 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: December 20, 2011

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b> <b>FY 2009</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>		Docket Number (Optional) 2003127.00122US3	
Application Number                      12/984,293-Conf. #2029		Filed                      January 4, 2011	
For     ALPINE SKI BINDING HEEL			
Art Unit            3618		Examiner                      B. D. Avery	
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.  The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):			
	<u>Fee</u>	<u>Small Entity Fee</u>	
<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$130	\$65	\$ _____
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$490	\$245	\$ _____
<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1110	\$555	\$     635.00
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$1730	\$865	\$ _____
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$2350	\$1175	\$ _____
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. <input type="checkbox"/> A check in the amount of the fee is enclosed. <input checked="" type="checkbox"/> Payment by credit card. <del>Form PTO-2038</del> is attached. <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number     08-0219     . <b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96). <input checked="" type="checkbox"/> attorney or agent of record. Registration Number     42,478 <input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34     _____			
_____ /Ronald R. Demsher/ Signature		_____ December 20, 2011 Date	
_____ Ronald R. Demsher Typed or printed name		_____ (617) 526-6000 Telephone Number	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input type="checkbox"/> Total of     1     forms are submitted.			

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Ronald R. Demsher./carla Ofodile		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Utility under 35 USC 111 (a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 3 months with \$0 paid	2253	1	635	635

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				635

<b>Electronic Acknowledgement Receipt</b>	
<b>EFS ID:</b>	11662065
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./carla ofodile
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	20-DEC-2011
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	14:20:59
<b>Application Type:</b>	Utility under 35 USC 111(a)

### **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 635
RAM confirmation Number	790
Deposit Account	080219
Authorized User	DEMSHER, RONALD R
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
<b>File Listing:</b>					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		122US3Amendment.pdf	77956	yes	7
			168eab15ceffd0db0429172b70123ccd905833c9		
	<b>Multipart Description/PDF files in .zip description</b>				
	<b>Document Description</b>		<b>Start</b>	<b>End</b>	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	4	
	Applicant Arguments/Remarks Made in an Amendment		5	7	
<b>Warnings:</b>					
<b>Information:</b>					
2	Extension of Time	122US3EOT.pdf	93438	no	1
			3fb1abf9b3b0ddb8da431b60c3f054ca0a59b002		
<b>Warnings:</b>					
<b>Information:</b>					
3	Fee Worksheet (SB06)	fee-info.pdf	30255	no	2
			456b53791307acf6e3d2e8dde50bb312aea18f9		
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			201649		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>12/984,293</b>		Filing Date <b>01/04/2011</b>		<input type="checkbox"/> To be Mailed		
<b>APPLICATION AS FILED – PART I</b>											
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/>		OR		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)	
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A		N/A		N/A		N/A		
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A		N/A		N/A		N/A		
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A		N/A		N/A		N/A		
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$	=	X \$	=	X \$	=	X \$	=	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=	X \$	=	X \$	=	X \$	=	
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))											
* If the difference in column 1 is less than zero, enter "0" in column 2.											
<b>APPLICATION AS AMENDED – PART II</b>											
(Column 1)			(Column 2)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT	12/20/2011	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
Total (37 CFR 1.16(i))	*	14	Minus	**	20	=	0	X \$	=	0	
Independent (37 CFR 1.16(h))	*	1	Minus	***	3	=	0	X \$	=	0	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
TOTAL ADD'L FEE											
<b>0</b>											
(Column 1)			(Column 2)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)		
Total (37 CFR 1.16(i))	*	Minus	**	X \$	=	X \$	=	X \$	=		
Independent (37 CFR 1.16(h))	*	Minus	***	X \$	=	X \$	=	X \$	=		
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
TOTAL ADD'L FEE											
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.											
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".											
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3

**CONFIRMATION NO. 2029**

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

## PUBLICATION NOTICE



OC000000049256216

**Title:**ALPINE SKI BINDING HEEL

**Publication No.**US-2011-0193324-A1

**Publication Date:**08/11/2011

## NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publicly available Searchable Databases via the Internet at [www.uspto.gov](http://www.uspto.gov). The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at [www.uspto.gov](http://www.uspto.gov) using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <http://pair.uspto.gov/>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3	2029
23483	7590	06/28/2011		
WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109			EXAMINER AVERY, BRIDGET D	
			ART UNIT 3618	PAPER NUMBER
			NOTIFICATION DATE 06/28/2011	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com  
whipusptopairs@wilmerhale.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	12/984,293	HOWELL, RICHARD J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BRIDGET AVERY	3618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2011 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/20/11</u> .   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 1 recites the limitation "the first surface" in line 8. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 1 recites the limitation "the second surface" in line 8. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Weigl et al. (US Patent 6,165,883).

Weigl et al. teaches a vector decoupling assembly for isolating two or more (vertical and lateral) force vectors applied to a safety binding securing a heel portion of a ski boot (2) to a ski (1), including: a lower heel assembly (4, 7) attached to the ski (1), as stated in col. 4, lines 10 and 11; an upper heel assembly (12) coupled to the lower

heel assembly (4, 7) and having a lateral release assembly (see housing 17, lever 27, spring 19, locking element 9) for applying lateral securing pressure to the ski boot (2); a linkage element (bearing block 22) fixedly attached to the lateral release assembly (17, 27, 19, 9); where the linkage element (22), a first surface (27a) and a second surface (recess 8) cooperate to limit motion of the lateral release assembly (17, 27, 19, 9) to within a predetermined region within a plane defined by the longitudinal and horizontal axes of the ski (1).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Korger et al. shows a safety clamp for ski binding employing a combined vertical and horizontal swing catch.

Hashioka shows a releaseable ski boot heel binding.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver, can be reached on 571-272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3618

published applications may be obtained from either Private PAIR or Public PAIR.

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Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bridget Avery/  
Examiner, Art Unit 3618

/HAU PHAN/

Primary Examiner, Art Unit 3618

<b>Notice of References Cited</b>	Application/Control No. 12/984,293	Applicant(s)/Patent Under Reexamination HOWELL, RICHARD J.	
	Examiner BRIDGET AVERY	Art Unit 3618	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-3,620,545 A	11-1971	Heinz Korger et al.	280/632
*	B	US-3,734,520 A	05-1973	Hashioka, Noliyasu	280/632
*	C	US-4,165,883 A	08-1979	Weigl et al.	280/618
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.






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## BIB DATA SHEET

CONFIRMATION NO. 2029

<b>SERIAL NUMBER</b> 12/984,293	<b>FILING or 371(c) DATE</b> 01/04/2011 <b>RULE</b>	<b>CLASS</b> 280	<b>GROUP ART UNIT</b> 3618	<b>ATTORNEY DOCKET NO.</b> 2003127.00122US3		
<b>APPLICANTS</b> Richard J. Howell, Stowe, VT; <b>** CONTINUING DATA *****</b> This application is a CON of 12/001,436 12/11/2007 PAT 7,887,084 which is a DIV of 10/780,455 02/17/2004 PAT 7,318,598 which claims benefit of 60/448,645 02/18/2003 <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **</b> 01/14/2011						
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input type="checkbox"/> No Verified and /BRIDGET D AVERY/ Acknowledged Examiner's Signature		<input type="checkbox"/> Met after Allowance Initials	<b>STATE OR COUNTRY</b> VT	<b>SHEETS DRAWINGS</b> 4	<b>TOTAL CLAIMS</b> 1	<b>INDEPENDENT CLAIMS</b> 1
<b>ADDRESS</b> WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109 UNITED STATES						
<b>TITLE</b> ALPINE SKI BINDING HEEL						
<b>FILING FEE RECEIVED</b> 527	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		


<b>Search Notes</b> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

SEARCHED			
Class	Subclass	Date	Examiner
280	618, 624, 625, 626, 627, 628, 62, 632, 6349	6/6/11	BA

SEARCH NOTES		
Search Notes	Date	Examiner

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

--	--

<p align="center"><b><i>Index of Claims</i></b></p> 	<b>Application/Control No.</b> 12984293	<b>Applicant(s)/Patent Under Reexamination</b> HOWELL, RICHARD J.
	<b>Examiner</b> BRIDGET AVERY	<b>Art Unit</b> 3618

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant				<input type="checkbox"/> CPA				<input type="checkbox"/> T.D.				<input type="checkbox"/> R.1.47			
<b>CLAIM</b>			<b>DATE</b>												
Final	Original	06/07/2011													
	1	✓													

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	49	US-2676813-\$.DID. OR US-20020101063-\$.DID. OR US-3578350-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3620545-\$.DID. OR US-3695625-\$.DID. OR US-3727932-\$.DID. OR US-3734520-\$.DID. OR US-3734522-\$.DID. OR US-3773344-\$.DID. OR US-3825273-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-3992032-\$.DID. OR US-7915705-\$.DID. OR US-4052086-\$.DID. OR US-4065151-\$.DID. OR US-4070034-\$.DID. OR US-4111453-\$.DID. OR US-4183549-\$.DID. OR US-4264088-\$.DID. OR US-4266806-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-4444413-\$.DID. OR US-4449731-\$.DID. OR US-4451059-\$.DID. OR US-4466634-\$.DID. OR US-4475743-\$.DID. OR US-4489956-\$.DID. OR US-4553772-\$.DID. OR US-4602804-\$.DID. OR US-4625991-\$.DID. OR US-4753452-\$.DID. OR US-4758017-\$.DID. OR US-5160159-\$.DID. OR US-7887084-\$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2011/06/19 13:37

L5	47	("20020101063"   "2676813"   "3578350"   "3606370"   "3610650"   "3620545"   "3695625"   "3727932"   "3734520"   "3734522"   "3773344"   "3825273"   "3865388"   "3897076"   "3902728"   "3905613"   "3909029"   "3936062"   "3992032"   "4052086"   "4065151"   "4070034"   "4111453"   "4183549"   "4264088"   "4266806"   "4268064"   "4286801"   "4288094"   "4288095"   "4294461"   "4307898"   "4429896"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4553772"   "4602804"   "4625991"   "4753452"   "4758017"   "5160159").PN. OR ("7887084"). URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2011/06/19 13:48
L6	160	("3129951"   "3317217"   "3325178"   "3326567"   "3351354"   "3366394"   "3408087"   "3432180"   "3473817"   "3497230"   "3527468"   "3529845"   "3529846"   "3550996"   "3554571"   "3554572"   "3578350"   "3580597"   "3594015"   "3604720"   "3606369"   "3608918"   "3610650"   "3620544"   "3620545"   "3625532"   "3675937"   "3727935"   "3733082"   "3734520"   "3762735"   "3778073"   "3820804"   "3830510"   "3836163"   "3876219"   "3909023"   "3933363"   "3937480"   "3944237"   "3950001"   "3989273"   "3989274"   "4022493"   "4033603"   "4060257"   "4103930"   "4111453"   "4165883"   "4183549"   "4188045"   "4190264"   "4214773"   "4307895"   "4421341"   "4444413"   "4489956"   "4533155"   "4607859"   "4624473"   "4625991"   "4681338"   "4773669"   "5024457"   "RE26670").PN. OR ("3578350"	US- PGPUB; USPAT; USOCR	OR	ON	2011/06/19 14:01

		"3620545"   "3695625"   "3734520"   "4111453"   "4183549"   "4266806"   "4444413"   "4449731"   "4451059"   "4466634"   "4475743"   "4489956"   "4602804"   "4625991"   "4758017"   "5160159").URPN.				
S1	796	"280"/\$.ccls. and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/12 16:51
S2	687	S1 and (lateral\$ or horizontal\$ or vertor\$)	USPAT	OR	OFF	2006/10/12 16:50
S3	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/12 16:51
S4	455	S3 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16 10:56
S5	1223	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2006/10/16 10:56
S6	455	S5 and (ski and (heel\$ same release))	USPAT	OR	OFF	2006/10/16 10:56
S7	395	S6 and (lateral or horizontal)	USPAT	OR	OFF	2006/10/16 10:57
S8	334	S6 and lateral	USPAT	OR	OFF	2006/10/16 10:57
S9	177	S6 and (lateral with release)	USPAT	OR	OFF	2006/10/16 10:58
S10	129	S6 and (lateral near4 release)	USPAT	OR	OFF	2006/10/16 10:58
S11	1	("4070034").PN.	USPAT	OR	OFF	2006/12/19 04:08
S12	2	((("4070034") or ("3734522"))).PN.	USPAT	OR	OFF	2006/12/19 04:09
S13	0	("skiandheelandlateral").PN.	USPAT	OR	OFF	2007/03/26 17:50
S14	2059	ski and heel and lateral	USPAT	OR	OFF	2007/03/26 17:50
S15	1242	"280"/\$.ccls. and (ski and heel and lateral)	USPAT	OR	OFF	2007/03/26 17:51
S16	1282	"280"/\$.ccls. and (ski and heel and (lateral adj "2" release))	USPAT	OR	OFF	2007/03/26 17:51
S17	166	(280/629).CCLS.	USPAT	OR	OFF	2007/07/09 14:21
S18	115	S17 and release	USPAT	OR	OFF	2007/07/09 14:22

S19	15	S17 and release with horizontal	USPAT	OR	OFF	2007/07/09 14:22
S20	15	S17 and (release with horizontal)	USPAT	OR	OFF	2007/07/09 14:25
S21	6	S20 and heel	USPAT	OR	OFF	2007/07/09 14:25
S22	1293	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2010/09/26 21:50
S23	476	S22 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/26 21:50
S24	9	("20020101063"   "2676813"   "3734522"   "3773344"   "3825273"   "3992032"   "4052086"   "4070034").PN. OR ("7318598").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/09/27 16:16
S25	31	US-2676813-\$.DID. OR US-3606370-\$.DID. OR US-3610650-\$.DID. OR US-3727932-\$.DID. OR US-3865388-\$.DID. OR US-3897076-\$.DID. OR US-3902728-\$.DID. OR US-3905613-\$.DID. OR US-3909029-\$.DID. OR US-3936062-\$.DID. OR US-4065151-\$.DID. OR US-4264088-\$.DID. OR US-4268064-\$.DID. OR US-4286801-\$.DID. OR US-4288094-\$.DID. OR US-4288095-\$.DID. OR US-4294461-\$.DID. OR US-4307898-\$.DID. OR US-4429896-\$.DID. OR US-7225104-\$.DID. OR US-4553772-\$.DID. OR US-4753452-\$.DID. OR US-20020101063-\$.DID. OR US-4070034-\$.DID. OR US-4052086-\$.DID. OR US-3992032-\$.DID. OR US-3825273-\$.DID. OR US-3773344-\$.DID. OR US-3734522-\$.DID.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/09/27 17:11
S26	158	(280/628).CCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:29
S27	0	("6nots23").PN.	USPAT; USOCR	OR	OFF	2010/09/27 17:30
S28	1293	((280/632) or (280/634) or (280/618) or (280/624) or (280/625) or (280/626) or (280/627)).CCLS.	USPAT	OR	OFF	2010/09/27 17:30
S29	476	S28 and (ski and (heel\$ same release))	USPAT	OR	OFF	2010/09/27 17:30
S30	104	S26 not S29	USPAT	OR	OFF	2010/09/27 17:30

S31	158	(280/628).OCLS.	USPAT; USOCR	OR	OFF	2010/09/27 17:34
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**6/ 19/ 2011 3:08:57 PM**

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	12/984,293-Conf. #2029
				Filing Date	January 4, 2011
				First Named Inventor	Richard J. HOWELL
				Art Unit	3618
				Examiner Name	Not Yet Assigned
Sheet	1	of	4	Attorney Docket Number	2003127.00122US3

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/B.A.	AA*	US-2,676,813	04-27-1954	Beyl	
	AB*	US-20020101063	08-01-2002	Dodge	
	AC*	US-3,578,350	05-11-1971	Suhner	
	AD*	US-3,606,370	09-20-1971	Spademan	
	AE*	US-3,610,650	10-05-1971	Korger et al.	
	AF*	US-3,620,545	11-16-1971	Heinz Korger et al.	
	AG*	US-3,695,625	10-03-1972	Salomon	
	AH*	US-3,727,932	04-17-1973	Druss et al.	
	AI*	US-3,734,520	05-22-1973	Hashioka	
	AJ*	US-3,734,522	05-22-1973	Salomon et al.	
	AK*	US-3,773,344	11-20-1973	Wilkes	
	AL*	US-3,825,273	07-23-1974	Greene	
	AM*	US-3,865,388	02-11-1975	Haldemann et al.	
	AN*	US-3,897,076	07-29-1975	Beyl et al.	
	AO*	US-3,902,728	09-02-1975	Salomon et al.	
	AP*	US-3,905,613	09-16-1975	Romeo	
	AQ*	US-3,909,029	09-30-1975	Salomon et al.	
	AR*	US-3,936,062	02-03-1976	Schweizer et al.	
/B.A.	AS*	US-3,992,032	11-16-1976	Swenson	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>

Examiner Signature	/Bridget Avery/	Date Considered	06/19/2011
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	12/984,293-Conf. #2029
				Filing Date	January 4, 2011
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Sheet	2	of	4	Attorney Docket Number	2003127.00122US3

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
/B.A./	AT*	US-4,052,086	10-04-1977	Eckart et al.	
	AU*	US-4,065,151	12-27-1977	Weinstein et al.	
	AV*	US-4,070,034	01-24-1978	Swenson	
	AW*	US-4,111,453	09-05-1978	Krob	
	AX*	US-4,183,549	01-15-1980	Salomon	
	AY*	US-4,264,088	04-28-1981	Replogle	
	AZ*	US-4,266,806	05-12-1981	Weigl et al.	
	AA1*	US-4,268,064	05-19-1981	Svoboda et al.	
	AB1*	US-4,286,801	09-01-1981	Richert et al.	
	AC1*	US-4,288,094	09-08-1981	Svoboda et al.	
	AD1*	US-4,288,095	09-08-1981	Wittmann et al.	
	AE1*	US-4,294,461	10-13-1981	Eckart et al.	
	AF1*	US-4,307,898	12-29-1981	Schmidt et al.	
	AG1*	US-4,429,896	02-07-1984	Spademan	
	AH1*	US-4,444,413	04-24-1984	Richert et al.	
	AI1*	US-4,449,731	05-22-1984	Knabel et al.	
	AJ1*	US-4,451,059	05-29-1984	Knabel et al.	
	AK1*	US-4,466,634	08-21-1984	Knabel et al.	
/B.A./	AL1*	US-4,475,743	10-09-1984	Wittmann	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		Application Number	12/984,293-Conf. #2029		
		Filing Date	January 4, 2011		
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		Examiner Name	Not Yet Assigned		
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		Number-Kind Code <sup>2</sup> (if known)			
/B.A./	AM1*	US-4,489,956	12-25-1984	Jungkind	
	AN1*	US-4,553,772	11-19-1985	Boussemart et al.	
	AO1*	US-4,602,804	07-29-1986	Spitaler et al.	
	AP1*	US-4,625,991	12-02-1986	Leichtfried	
	AQ1*	US-4,753,452	06-28-1988	Boussemart et al.	
	AR1*	US-4,758,017	07-19-1988	Stritzl et al.	
	AS1*	US-5,160,159	11-03-1992	Gorza et al.	
/B.A./	AT1*	US-7,887,084	02-15-2011	Howell	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature	/Bridget Avery/	Date Considered	06/19/2011
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				Filing Date	January 4, 2011
				First Named Inventor	Richard J. HOWELL
				Art Unit	3618
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	2003127.00122US3
Sheet	4	of	4		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/B.A.	CA**	Minutes to ASTM F-27 Skiing Safety Meeting, Burlington, VT, July 20-21, 2002	

Examiner Signature	/Bridget Avery/	Date Considered	06/19/2011
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/984,293	01/04/2011	3618	527	2003127.00122US3	1	1

CONFIRMATION NO. 2029

UPDATED FILING RECEIPT



\*OC000000047418871\*

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

Date Mailed: 05/04/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

**Applicant(s)**

Richard J. Howell, Stowe, VT;

**Assignment For Published Patent Application**

Kneebinding, Inc., Stowe, VT

**Power of Attorney:** The patent practitioners associated with Customer Number 23483

**Domestic Priority data as claimed by applicant**

This application is a CON of 12/001,436 12/11/2007 PAT 7,887,084  
which is a DIV of 10/780,455 02/17/2004 PAT 7,318,598  
which claims benefit of 60/448,645 02/18/2003

**Foreign Applications** (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.)

**If Required, Foreign Filing License Granted:** 01/14/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/984,293**

**Projected Publication Date:** 08/11/2011

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

**Title**

ALPINE SKI BINDING HEEL

**Preliminary Class**

280

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For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

page 2 of 3

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875						Application or Docket Number 12/984,293	
<b>APPLICATION AS FILED - PART I</b>							
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA		RATE(\$)	FEE(\$)	RATE(\$)	FEE(\$)
BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A		N/A	82	N/A	
SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A		N/A	270	N/A	
EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A		N/A	110	N/A	
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	1	minus 20 =	*	x 26 =	0.00	OR	
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	1	minus 3 =	*	x 110 =	0.00	OR	
APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$270 (\$135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				0.00	OR	
MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>					0.00	OR	
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	462	TOTAL	
<b>APPLICATION AS AMENDED - PART II</b>							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)
	Total <small>(37 CFR 1.16(i))</small>	*	Minus **	=	x =	OR	x =
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus ***	=	x =	OR	x =
	Application Size Fee <small>(37 CFR 1.16(s))</small>					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>					OR	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)
	Total <small>(37 CFR 1.16(i))</small>	*	Minus **	=	x =	OR	x =
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus ***	=	x =	OR	x =
	Application Size Fee <small>(37 CFR 1.16(s))</small>					OR	
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>					OR	
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
TOTAL ADD'L FEE		TOTAL ADD'L FEE		TOTAL ADD'L FEE		TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.							



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	Not Yet Assigned
Title:	ALPINE SKI BINDING HEEL		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO NOTICE TO FILE MISSING PARTS OF APPLICATION**

Dear Sir:

In response to the Notice to File Missing Parts of Application – Filing Date Granted mailed January 20, 2011, Applicant respectfully submits the Filing Fee for the Application (as shown on accompanying Fee Transmittal), a Petition for Extension of Time, and an Information Disclosure Statement.

Please charge our Credit Card in the amount of \$592.00 covering the required fees. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 08-0219, under Order No. 2003127.00122US3.

Respectfully submitted,

Dated: April 20, 2011

/Ronald R. Demsher/  
Ronald R. Demsher  
Registration No.: 42,478  
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2009</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>		Docket Number (Optional) 2003127.00122US3	
Application Number 12/984,293-Conf. #2029		Filed January 4, 2011	
For ALPINE SKI BINDING HEEL			
Art Unit 3618		Examiner Not Yet Assigned	
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.			
The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):			
		<u>Fee</u>	<u>Small Entity Fee</u>
<input checked="" type="checkbox"/>	One month (37 CFR 1.17(a)(1))	\$130	\$65      \$ 65.00
<input type="checkbox"/>	Two months (37 CFR 1.17(a)(2))	\$490	\$245      \$
<input type="checkbox"/>	Three months (37 CFR 1.17(a)(3))	\$1110	\$555      \$
<input type="checkbox"/>	Four months (37 CFR 1.17(a)(4))	\$1730	\$865      \$
<input type="checkbox"/>	Five months (37 CFR 1.17(a)(5))	\$2350	\$1175      \$
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.			
<input type="checkbox"/> A check in the amount of the fee is enclosed.			
<input checked="" type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.			
<input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account.			
<input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 08-0219.			
<b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>			
I am the <input type="checkbox"/> applicant/inventor.			
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).			
<input checked="" type="checkbox"/> attorney or agent of record. Registration Number 42,478			
<input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34			
_____ /Ronald R. Demsher Signature		_____ April 20, 2011 Date	
_____ Ronald R. Demsher Typed or printed name		_____ (617) 526-6000 Telephone Number	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input type="checkbox"/> Total of 1 forms are submitted.			

Docket No.: 2003127.00122US3  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Richard J. HOWELL	Confirmation No.:	2029
Application No.:	12/984,293	Art Unit:	3618
Filed:	January 4, 2011	Examiner:	Not Yet Assigned
Title:	ALPINE SKI BINDING HEEL		

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Dear Sir:

This Information Disclosure Statement is being filed prior to the mailing date of a first Office Action on the merits. No fee is required.

Those documents which are marked with a double asterisk (\*\*) next to the Cite No. in the attached form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in prior application numbers 10/780455 filed February 17, 2004 and 12/001436 filed December 11, 2007 and relied upon in this application for an earlier filing date under 35 U.S.C. 120.

Application No.: 12/984,293

Docket No.: 2003127.00122US3

Applicant requests that the Examiner initial and return a copy of the enclosed Form PTO SB-08 with the next communication.

Respectfully submitted,

Dated: April 20, 2011

/Ronald R. Demsher/

Ronald R. Demsher

Registration No.: 42,478

Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, Massachusetts 02109  
(617) 526-6000 (telephone)  
(617) 526-5000 (facsimile)

Electronic Patent Application Fee Transmittal				
<b>Application Number:</b>		12984293		
<b>Filing Date:</b>		04-Jan-2011		
<b>Title of Invention:</b>		ALPINE SKI BINDING HEEL		
<b>First Named Inventor/Applicant Name:</b>		Richard J. Howell		
<b>Filer:</b>		Ronald R. Demsher./Michael Riego		
<b>Attorney Docket Number:</b>		2003127.00122US3		
Filed as Small Entity				
<b>Utility under 35 USC 111 (a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
Utility filing Fee (Electronic filing)	4011	1	82	82
Utility Search Fee	2111	1	270	270
Utility Examination Fee	2311	1	110	110
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
Late filing fee for oath or declaration	2051	1	65	65
<b>Petition:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 1 month with \$0 paid	2251	1	65	65
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>592</b>

Electronic Acknowledgement Receipt	
<b>EFS ID:</b>	9906330
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./Michael Riego
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	20-APR-2011
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	15:37:19
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 592
RAM confirmation Number	2080
Deposit Account	080219
Authorized User	LADD,CATHLEEN
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
<b>File Listing:</b>					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	2003127_00122US3_SB08.pdf	131138  29ecf8a4513a31404587071d2927ff59adf6 dbd3	no	4
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied IDS fillable form					
2	Applicant Response to Pre-Exam Formalities Notice	2003127_00122US3_Response _NTFMP.pdf	62261  2049e746b0d83fbf83f6521e21793a7515a 2cd3	no	1
<b>Warnings:</b>					
<b>Information:</b>					
3	Extension of Time	2003127_00122US3_Extension _of_Time.pdf	93487  908def9ff126e54fe24557b271c8173322a9 7737	no	1
<b>Warnings:</b>					
<b>Information:</b>					
4	Transmittal Letter	2003127_00122US3_IDS.pdf	62230  1d9795ff18cc5142682ebd71b6024685e9e cd1e3	no	2
<b>Warnings:</b>					
<b>Information:</b>					
5	Fee Worksheet (PTO-875)	fee-info.pdf	38598  8c8412324187807b45afe35a4c43b8120ed beb18	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			387714		



This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

<b>Electronic Acknowledgement Receipt</b>	
<b>EFS ID:</b>	9906330
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./Michael Riego
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.00122US3
<b>Receipt Date:</b>	20-APR-2011
<b>Filing Date:</b>	04-JAN-2011
<b>Time Stamp:</b>	15:37:19
<b>Application Type:</b>	Utility under 35 USC 111(a)

### **Payment information:**

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$ 592
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Deposit Account	080219
Authorized User	LADD,CATHLEEN
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p>Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)					
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)					
<b>File Listing:</b>					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	2003127_00122US3_SB08.pdf	131138  29ecf8a4513a31404587071d2927ff59adf6 dbd3	no	4
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied IDS fillable form					
2	Applicant Response to Pre-Exam Formalities Notice	2003127_00122US3_Response _NTFMP.pdf	62261  2049e746b0d83fbf83f6521e21793a7515a 2cd3	no	1
<b>Warnings:</b>					
<b>Information:</b>					
3	Extension of Time	2003127_00122US3_Extension _of_Time.pdf	93487  908def9ff126e54fe24557b271c8173322a9 7737	no	1
<b>Warnings:</b>					
<b>Information:</b>					
4	Transmittal Letter	2003127_00122US3_IDS.pdf	62230  1d9795ff18cc5142682ebd71b6024685e9e cd1e3	no	2
<b>Warnings:</b>					
<b>Information:</b>					
5	Fee Worksheet (PTO-875)	fee-info.pdf	38598  8c8412324187807b45afe35a4c43b8120ed beb18	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			387714		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	12/984,293-Conf. #2029
				Filing Date	January 4, 2011
				First Named Inventor	Richard J. HOWELL
				Art Unit	3618
				Examiner Name	Not Yet Assigned
Sheet	1	of	4	Attorney Docket Number	2003127.00122US3

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-2,676,813	04-27-1954	Beyl	
	AB*	US-20020101063	08-01-2002	Dodge	
	AC*	US-3,578,350	05-11-1971	Suhner	
	AD*	US-3,606,370	09-20-1971	Spademan	
	AE*	US-3,610,650	10-05-1971	Korger et al.	
	AF*	US-3,620,545	11-16-1971	Heinz Korger et al.	
	AG*	US-3,695,625	10-03-1972	Salomon	
	AH*	US-3,727,932	04-17-1973	Druss et al.	
	AI*	US-3,734,520	05-22-1973	Hashioka	
	AJ*	US-3,734,522	05-22-1973	Salomon et al.	
	AK*	US-3,773,344	11-20-1973	Wilkes	
	AL*	US-3,825,273	07-23-1974	Greene	
	AM*	US-3,865,388	02-11-1975	Haldemann et al.	
	AN*	US-3,897,076	07-29-1975	Beyl et al.	
	AO*	US-3,902,728	09-02-1975	Salomon et al.	
	AP*	US-3,905,613	09-16-1975	Romeo	
	AQ*	US-3,909,029	09-30-1975	Salomon et al.	
	AR*	US-3,936,062	02-03-1976	Schweizer et al.	
	AS*	US-3,992,032	11-16-1976	Swenson	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with a single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	12/984,293-Conf. #2029
				Filing Date	January 4, 2011
				First Named Inventor	Richard J. HOWELL
				Art Unit	3618
				Examiner Name	Not Yet Assigned
Sheet	2	of	4	Attorney Docket Number	2003127.00122US3

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AT*	US-4,052,086	10-04-1977	Eckart et al.	
	AU*	US-4,065,151	12-27-1977	Weinstein et al.	
	AV*	US-4,070,034	01-24-1978	Swenson	
	AW*	US-4,111,453	09-05-1978	Krob	
	AX*	US-4,183,549	01-15-1980	Salomon	
	AY*	US-4,264,088	04-28-1981	Replogle	
	AZ*	US-4,266,806	05-12-1981	Weigl et al.	
	AA1*	US-4,268,064	05-19-1981	Svoboda et al.	
	AB1*	US-4,286,801	09-01-1981	Richert et al.	
	AC1*	US-4,288,094	09-08-1981	Svoboda et al.	
	AD1*	US-4,288,095	09-08-1981	Wittmann et al.	
	AE1*	US-4,294,461	10-13-1981	Eckart et al.	
	AF1*	US-4,307,898	12-29-1981	Schmidt et al.	
	AG1*	US-4,429,896	02-07-1984	Spademan	
	AH1*	US-4,444,413	04-24-1984	Richert et al.	
	AI1*	US-4,449,731	05-22-1984	Knabel et al.	
	AJ1*	US-4,451,059	05-29-1984	Knabel et al.	
	AK1*	US-4,466,634	08-21-1984	Knabel et al.	
	AL1*	US-4,475,743	10-09-1984	Wittmann	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	12/984,293-Conf. #2029
				Filing Date	January 4, 2011
				First Named Inventor	Richard J. HOWELL
				Art Unit	3618
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	2003127.00122US3
Sheet	4	of	4		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA**	Minutes to ASTM F-27 Skiing Safety Meeting, Burlington, VT, July 20-21, 2002	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\* CITE NO.: Those document(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.



<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875						Application or Docket Number 12/984,293				
<b>APPLICATION AS FILED - PART I</b>										
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA		RATE(\$)	FEE(\$)	RATE(\$)	FEE(\$)			
BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A		N/A	82	N/A				
SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A		N/A	270	N/A				
EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A		N/A	110	N/A				
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	1	minus 20 =	*	x 26 =	0.00	OR				
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	1	minus 3 =	*	x 110 =	0.00	OR				
APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$270 (\$135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				0.00	OR				
MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>					0.00	OR				
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	462	TOTAL				
<b>APPLICATION AS AMENDED - PART II</b>										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=	x	=	OR	x	=
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee <small>(37 CFR 1.16(s))</small>							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=	x	=	OR	x	=
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee <small>(37 CFR 1.16(s))</small>							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										



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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3

CONFIRMATION NO. 2029

FORMALITIES LETTER



OC000000045509188

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

Date Mailed: 01/20/2011

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

**Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.  
*Applicant must submit \$82 to complete the basic filing fee for a small entity.*

The applicant needs to satisfy supplemental fees problems indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- A surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.16(f) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted.

**SUMMARY OF FEES DUE:**

Total fee(s) required within **TWO MONTHS** from the date of this Notice is \$527 for a small entity

- \$82 Statutory basic filing fee.
- \$65 Surcharge.
- The application search fee has not been paid. Applicant must submit \$270 to complete the search fee.
- The application examination fee has not been paid. Applicant must submit \$110 to complete the examination fee for a small entity in compliance with 37 CFR 1.27.

Replies should be mailed to:

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://portal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

/llvuong/

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Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
12/984,293	01/04/2011	3618	0.00	2003127.00122US3	1	1

CONFIRMATION NO. 2029

FILING RECEIPT



\*OC000000045509187\*

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109

Date Mailed: 01/20/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

**Applicant(s)**

Richard J. Howell, Stowe, VT;

**Assignment For Published Patent Application**

Kneebinding, Inc., Stowe, VT

**Power of Attorney:** The patent practitioners associated with Customer Number 23483

**Domestic Priority data as claimed by applicant**

This application is a CON of 12/001,436 12/11/2007  
which is a DIV of 10/780,455 02/17/2004 PAT 7,318,598  
which claims benefit of 60/448,645 02/18/2003

**Foreign Applications** (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.)

**If Required, Foreign Filing License Granted:** 01/14/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/984,293**

**Projected Publication Date:** To Be Determined - pending completion of Missing Parts

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

**Title**

ALPINE SKI BINDING HEEL

**Preliminary Class**

280

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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page 2 of 3

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/984,293	01/04/2011	Richard J. Howell	2003127.00122US3

**CONFIRMATION NO. 2029**

**POA ACCEPTANCE LETTER**

23483  
WILMERHALE/BOSTON  
60 STATE STREET  
BOSTON, MA 02109



\*OC000000045509134\*

Date Mailed: 01/20/2011

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 01/04/2011.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/bphe/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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<b>POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM</b>	Application Number	12/001,436
	Filing Date	December 11, 2007
	First Named Inventor	Richard J. Howell
	Title	ALPINE SKI BINDING HEEL UNIT
	Art Unit	3618
	Examiner Name	Not Yet Assigned
	Attorney Docket No.	2003127.122US2

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☒ Practitioners associated with the Customer Number: 23483

OR

☐ Practitioner(s) named below:

Name	Registration Number	Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

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Zip

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Telephone

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I am the:

☒ Applicant/Inventor.☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature	<i>Richard J. Howell</i>	Date	MARCH 10, '08
Name	Richard J. Howell	Telephone	802-760-3026
Title and Company	Inventor		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Richard J. HowellApplication No./Patent No.: 12/001,436Filed/Issue Date: December 11, 2007Entitled: ALPINE SKI BINDING HEEL UNITKneeBinding, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
(The extent (by percentage) of its ownership interest is \_\_\_\_\_ %)

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 020676, Frame 0597, or for which a copy thereof is attached.

OR

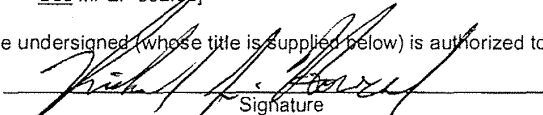
- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
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The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
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☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.  
[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.02]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

  
SignatureRichard J. Howell  
Printed or Typed NamePRESIDENT  
TitleMARCH 10, '08  
Date802-760-3026  
Telephone Number

## ALPINE SKI BINDING HEEL UNIT

### CROSS-REFERENCE TO RELATED APPLICATIONS

**[0001]** This patent application is a Continuation Patent Application of U.S. Patent Application Serial No. 12/001,436, filed on December 11, 2007 entitled ALPINE SKI BINDING HEEL UNIT, which is a Divisional Patent Application of U.S. Patent Application Serial No. 10/780,455, filed on February 17, 2004, which claims priority under 35 U.S.C. §119(e) to U.S. Provisional Application Serial No. 60/448,645, filed on February 18, 2003, all of which are expressly incorporated herein by reference in their entirety.

### BACKGROUND

**[0002]** This invention relates in general to alpine ski bindings and, in particular, to multi-directional release alpine ski binding heel units that release in the vertical and lateral directions..

**[0003]** Ski binding heel units have a jaw that is adapted to hold a boot and move between a boot retention position and a release position. The jaw vertical pivots around an axis transverse to the longitudinal axis of the ski and/or binding against the action of an elastic system. The elastic system comprises a mobile member biased by a spring against a release incline on a support attached to the ski. Vertical heel release bindings have serious disadvantages because vertical release bindings only release the ski when there is downward stress imparted by the skier on the ski where the area of applied stress is located in front of the boot's fulcrum point, which fulcrum is typically located under the ball of the foot; or release the ski when there is an upward stress applied to the ski by the skier when the skier is turned backwards in a fall with the top/aft section of the ski being dragged in the snow. Ski binding heel units that only release vertically rely on the mating ski binding toe units (which toe units release in response to lateral stresses or in the case of multi-directional toes units, release in response to lateral and special vertical stresses), which in the case of multi-directional release toes that provide vertical release

in response to vertical stresses applied to the ski by the skier to the top after-body section of the ski during pure backward falls and release vertically at the toe in response to vertical stresses being applied by the snow surface when the skier is backwards and the tip of the ski is being dragged in the snow. Heels that release only in the vertical direction rely on the mating ski binding toe units to provide lateral release in response to lateral stresses that enter the fore-body of the ski during forward twisting falls and in response to pure straight-downward twisting loads where an almost pure-torque is applied to the ski. Accordingly, with heels that only provide vertical release, lateral release of the ski from the boot is not possible when lateral forces are applied to the ski immediately under or near the heel that only releases vertically.

**[0004]** In an equal-and opposite vernacular, the boot can release from the ski, or the ski can release from the boot.

**[0005]** All alpine ski bindings provide lateral toe release to release the ski from the boot when a transverse-longitudinal (side of the ski) force is applied to the ski at all points along the ski, except where a lateral force is applied to the ski immediately under or near a non lateral releasing heel. A heel that releases in the vertical direction only which relies on a lateral releasing toe can be dangerous to the knee in the event of lateral forces being applied to the ski immediately under a heel that only provides vertical release, because a lateral force applied to a non-releasing ski, under a non-lateral releasing heel, can act over the entire length of the lower leg to generate a moment about the femur when the knee is bent at nearly 70-degrees to 110-degrees, which femur is semi-rigidly attached to the hip, thereby producing very high strain across the anterior cruciate ligament of the knee, often causing rupture of the ACL

**[0006]** Heel unit bindings that release both vertically and laterally have been proposed. Multi-directional heel unit bindings can have a jaw that laterally pivots around a vertical axis located on the longitudinal plane of symmetry of the ski or a jaw mounted on a universal joint and biased to a centered retention position by an elastic locking system. These heel unit bindings, however, have serious disadvantages. These disadvantages include unsatisfactory lateral and vertical retention of the ski to the boot.

**[0007]** Multi-directional release bindings that exhibit unsatisfactory lateral and vertical ski retention fail to retain skis to boots during normal controlled skiing which gives rise to a condition called pre-release. Pre-release occurs when a ski binding releases a ski during normal controlled skiing. Pre-release can be caused by an undesired relationship between the vertical forces, the lateral forces, the fore-and-aft forces, the forward and backward bending moments, the torsional moments (pure torques) and the roll moments (edging loads) that enter the binding

**[0008]** To overcome pre-release, some skiers manually increase the release level biasings of the ski binding which increases the retention of the ski to the boot in the binding. The increase in release level offsets inadvertent pre-release. However, the increase in retention also increases the release level, negating the original benefits that multi-directional bindings are intended to resolve.

**[0009]** Many of the multi-directional heel release bindings have offered the promise of improved release but have failed to provide adequate retention in practice. Consequently, previous multi-directional heel bindings do not meet fundamental design requirements of an alpine ski binding including providing proper retention of a ski to a boot during controlled skiing maneuvers

**[0010]** There is also one multi-directional heel unit which provides false-positive retention, because it provides retention during controlled skiing, but fails to allow proper lateral heel release when roll moments (from edging) are induced into the binding, and is being taken to market, regardless, because there is no international standard that tests for the effects of induced roll moments on proper lateral heel release. Therefore, in this special case, the important promise of multi-directional release is not present during edging, which is almost always occurring during controlled and uncontrolled skiing (potentially injurious falls).

**[0011]** Despite improvements in multi-directional toe release bindings, the incidence of knee injuries continues to increase. Frequently the anterior cruciate ligament (ACL) of knee is strained or ruptured. ACL strain intensifies when lateral forces are applied to the ski immediately under or near the projected tibial axis (coaxial with the

tibia), generally known as phantom-foot fall kinematics. In phantom-foot falls a lateral heel release binding will avert ACL strain. For example, when the knee is in a flexion angle of approximately 70 to 110-degrees, lateral forces applied to the bottom of the project tibia axis generate a torque about the femoral axis when the hip is semi-fixed. Due to the long length of the lever-arm from the base of the ski, including the thickness of the ski, the thickness of the binding (often also including "under-binding devices" / plates), the thickness of the heel section of the boot sole and the long length of the tibia), this high leverage generates a large torque about the femur where the instant unit stress through the knee is applied as strain to the ACL. In this frequent circumstance, a lateral heel release binding could release. However, a multi-directional heel release binding that accommodates the release of the ski in the above described situation, which provides proper lateral release during edge-induced roll moments and also prevents pre-release during normal skiing conditions has yet to be reduced to practice.

**[0012]** Pre-release in a multi-directional release heel (that provides release in the lateral and vertical directions) is primarily caused by an improper cross-linking of the design of the lateral and vertical release mechanisms; or by the cross-linked design of the mechanisms that control lateral, vertical, longitudinal, roll (induced edging), and forward and backward bending moments, causing the pure lateral release mode or the pure vertical release mode (the injurious modes) to become overloaded by the linked addition of the other non-lateral and non-vertical stresses (non-injurious / innocuous modes), by excessive friction between the release interfaces (low friction interfaces not only improve combined-loading release, but also enhance the rapid re-centering of the ski to the boot during innocuous stresses), and by insuring that the fitting adjustments that properly connect the binding to the individual sizing of the boot are correct.

**[0013]** In related art with a multi-directional heel release, a center release mechanism is used. However, center release mechanisms show evidence of internal friction, especially during induced roll moments from edging. Furthermore, snow can be forced into the front end of the binding where the moving twist release interface resides between the bottom side of the binding and the ski. The snow builds up, and when compressed by the cyclical action of ski flex and counter-flex, forms an expanding layer

of ice that greatly increases the resultant twist release. The presence of snow and ice melts deposits large amounts of dirt and grit in the release interfaces. The deposition greatly increases the resultant twist release and subsequent resultant torsional loading induced into the tibia during combined forward twisting falls, by as much as 300%, easily causing a fractured tibia.

**[0014]** A multi-directional release binding that takes into consideration the aforementioned intricacies and prevents pre-release has not been reduced to practice.

#### SUMMARY OF THE INVENTION

**[0015]** An alpine ski binding heel unit is disclosed that includes a primary vertical release, lateral heel release and longitudinal pressure compensator. The primary vertical release, lateral heel release and longitudinal pressure compensator are de-linked from each other. That is, they are functionally independent mechanisms. The forward release, the lateral heel release, and longitudinal pressure compensator include independent adjustment.

**[0016]** In one embodiment, the lateral heel release includes a lateral release cam. The lateral release cam features a decisively controlled level of release effort as the heel of the boot displaces from the longitudinal center of the ski. The lateral release cam and similarly matched cam interface include two pairs of individual cam members. Each pair includes a left individual cam member and right individual cam member for lateral heel release in the left and right direction, respectively. The individual cam member comprise rounded faces such that during dynamic motion of the lateral release only one or two cam members are in contact with the matched cam interface. The lateral release cam restricts the movement of the lateral heel release to a predetermined path of both rotation and translation. The shape of the individual cam members and the matched cam interface define this predetermined path.

**[0017]** In one embodiment, the left and right side individual cam members are shaped symmetrically providing similar lateral release in either the inward or outward directions. In another embodiment, the two sides are shaped asymmetrically to provide

unequal release in the inward and outward directions. The asymmetry is shaped so that the gross features of the individual cam members are either curved toward the fore body of the ski or curved aft toward the after-body of the ski. Curving forward increases the net lateral release, while curving aft decreases the net lateral release.

**[0018]** During dynamic actuation, the shape of the individual cam members shifts the instant center of contact between the lateral release cam and the matched cam interface. The contact center during its initial phase of lateral movement is at the inner pair of individual cam members. Specifically, one of the individual cam members (left or right) will contact the matched cam interface during the initial phase of lateral release. Then, during the latter phase of lateral movement, the contact center shifts from the inner pair to the outer pair of individual cam members (either left or right).

**[0019]** Analytically, the lateral heel release includes an incremental lever arm that resists lateral motion. The incremental lever arm is defined by the distance between the point of contact between the tension shaft and the point of contact on the lateral release cam. The incremental lateral release cam tilts during initial and latter phases of release. The lateral release cam tilt allows the instant lateral center of effort (from the longitudinal pressure) of the boot to shift laterally to a point that is farther away from the concentrated point of contact. The rolling nature of the contact interface, defined by the lateral release cam and the matched cam interface, minimizes changes in the coefficient of friction within the cam interface of the lateral heel release mechanism.

**[0020]** Lateral release of the ski from the boot occurs after the instant lateral center of the boot's longitudinal pressure is displaced past the outer most individual cam member (either left or right). The incremental lever arm offsets an opposing lever arm of the lateral release spring-bias. When the boot's lateral instant center of longitudinal pressure is disposed near the outer pair of individual cam members, the ski, relative to the boot, can either continue to move laterally until release if the induced load increased, or the ski, relative to the boot, can be pulled back to center if the loading innocuously dissipates. The net effect of multiple lever arms as described above pulls the ski, relative to the boot, back to center.

**[0021]** In one or more embodiments, a vector decoupler mechanism separates and isolates undesired release conditions from intended release conditions. The vector decoupler mechanism filters events including induced roll loads (due to edging on snow or ice), forward bending moments, vertical forces and backward bending moments from the primary lateral and vertical heel release mechanisms. The vector decoupler prevents influence on objects including the lateral heel release, the vertical heel release and the longitudinal pressure compensator.

**[0022]** The vector decoupler mechanism includes a tongue that extends from the upper stem of the lateral release cam. The tongue moves between two plates disposed above and below the tongue. The two plates are stationary relative to lateral heel release and are a part of a lower heel unit housing. The lower heel unit housing connects to the non-moving side of the lateral release cams.

**[0023]** The heel unit as described also provides the function of entry and exit into and out of the ski by virtue of the movement of the vertical release feature. Stepping upon a treadle latches the heel unit to the boot. The other protruding end of the heel unit can be stepped upon by the opposite ski, boot, pole or hand to effect stepping-out of (i.e., disengaging the boot from) the heel unit.

**[0024]** The vector decoupler mechanism filters out unwanted non-lateral loads away from the lateral release cam. The unwanted loads include those that occur when stepping-into the binding (as during latching the vertical release mechanism), those that occur during vertical only release, and those that occur during edging on snow or ice (roll moments).

**[0025]** The longitudinal pressure compensator includes a spring. The spring bias produces linear force between the boot and the jaw (heel interface of the binding) of the binding. Ski flex causes the spring to become compressed. In one embodiment, the longitudinal pressure compensator mechanism is semi-linked to the primary vertical heel release and lateral heel release mechanisms. Consequently, the longitudinal pressure on the lateral heel release mechanism and vertical release mechanism increases proportionally and predictably in the event of ski flex as a function of the spring rate of



the forward pressure spring.

**[0026]** The design largely blocks the introduction of foreign matter into the lateral heel release cam mechanism, thereby not significantly affecting performance. The open space between the lateral release cam and the matching cam interface may be partially filled with a compressible rubber-like polymer to prevent the introduction of mud, road-salt and ice contaminants.

**[0027]** Another embodiment describes a heel pad, to which the heel area of the sole of the boot rests, which is coated with a low-friction element to minimize the lateral friction produced by normal forces (downward forces). An alternative describes a different coefficient of friction coating surface, such as, polytetrafluoroethylene (PTFE) or polypropylene. This low-friction interface maintains an expected level of lateral-twist release during the introduction of combined vertical-downward and roll loads, as primarily controlled by the spring-biased lateral heel release.

#### BRIEF DESCRIPTION OF THE DRAWING

**[0028]** FIG. 1 illustrates a side view of the alpine ski binding heel unit;

**[0029]** FIG. 2 is a more detailed side view of the heel unit of FIG. 1;

**[0030]** FIG. 3 illustrates a cross-sectional top view of a lateral release mechanism including the spring biasing; and,

**[0031]** FIG. 4 is a more detailed cross-sectional top view of the lateral release mechanism of FIG. 3.

#### DETAILED DESCRIPTION

**[0032]** FIG. 1 shows a sectional side view of a ski binding heel unit 100. The ski binding heel unit includes an upper heel housing 16, lower heel housing 27, heel pad 13, lateral release 340, interface support 330, and vector decoupler mechanism 60. Heel pad

13 connects to interface support. The heel housing is disposed on the lateral release 340, which is connected to the vector decoupler mechanism 60.

**[0033]** FIG. 2 details a side view of the alpine ski binding heel unit shown in FIG. 1. Upper Heel housing 16 includes a pivot rod 18, cam surfaces 19a and 19b stem section 17b, lateral release cam assembly 17, vertical release cam follower 20, vertical release spring 21, threaded cap 22, window 24, polymer piece 25, surface 26, region 33, and heel cup assembly 47.

**[0034]** As used herein, the longitudinal and horizontal plane of the ski is that plane which is parallel to the bottom surface of the ski. The longitudinal and vertical plane of the ski is that plane which is perpendicular to the longitudinal and horizontal plane of the ski and parallel to the longitudinal centerline of the ski.

**[0035]** Upper heel housing 16 connects to lateral release cam 17 by way of a pivot rod 18. Vertical release is a function of opposing vertical release cam surfaces 19a and 19b on the aft-most end of the upper one-third stem section 17b of lateral release cam 17, and the vertical release cam follower 20. The vertical release spring 21 (shown by an "X") in the large internal pocket of the upper heel housing 16 pushes cam follower 20. Forward release threaded cap 22 compresses the opposing end of spring.

**[0036]** A window 24 on surface 26 registers the release adjustment value. In one embodiment, a transparent polymer piece 25 covers the window 24. In a forward skiing fall, which generates a forward bending moment on the lower leg of the skier, the ski boot applies an upward vertical force to region 33 of the underside of heel cup 47 which heel cup is integral with upper heel housing 16.

**[0037]** The upper heel housing 16 holds and compresses a ski boot heel downward to oppose the upward forces generated by the ski boot during skiing. Forces include those from forward bending moments and roll moments generated during edging because region 33 and pivot rod 18 have a lateral width to resist such induced roll moments from edging. The skier removes the ski boot from the alpine ski binding heel unit by applying downward pressure to the top end of upper heel housing 16 with the opposite ski,

opposite boot, by ski pole, or by an open hand.

**[0038]** Cam follower 20 moves along the length of the pocket of the long axis of upper heel housing 16 in response to upward vertical forces being applied to region 33 or in response to downward exiting forces applied to the upper end of upper heel housing 16. The shape of cam surfaces 19a and 19b control the relationship of the forces and corresponding displacement of cam follower 20, as biased by spring 21, which allows for the rotational displacement about a horizontal axis 18 of upper heel housing 16 and the vertical displacement of the ski boot in concert with region 33.

**[0039]** The vertical release cam follower 20 is made of plastic, while the moving lateral release cam 17 / 17b is made of coated die cast metal or injection molded plastic, although other suitable materials known in the art may also be used. The vertical release cam interface between cam surfaces 19a and 19b can be heavily greased with moderately high viscosity low-friction grease such as molybdenum disulfide or the like. The wicking action of cam surfaces 19a and 19b, as in the way an eye-lid functions, preclude mud, road-salt and ice from interfering with smooth vertical release cam action.

**[0040]** Interface support 330 includes bottom surface, stop-lock/nut 29, teeth 30, longitudinal spring 32, and lower carriage 12.

**[0041]** Lower carriage 11, connects to the top surface of a ski (not shown), to a riser plate (not shown), a lifter (not shown) or to an integral rail-system (not shown). Stop-lock/nut 29 has one or more teeth 30 to allow selective movement of lower heel housing 27 along the length of lower carriage 12 in conjunction with slots 31 that are formed in lower carriage 12. Turning stop-lock/nut 29 facilitates movement of lower heel housing 27 relative to lower carriage 12 to properly fit various lengths of ski boots between the lower heel housing 27 and an alpine binding toe piece (not shown).

**[0042]** In series with the stop-lock/nut 29 and lower heel housing 27 is longitudinal spring 32, which provides a spring bias between lower heel housing 27 and lower carriage 12. Longitudinal spring 32 also provides longitudinal pressure between the lower heel housing 27 and alpine binding toe piece to ensure proper hold of a boot during

the ski's counter-flex. Counter-flex increases the strain on the top surface of the ski, thereby increasing the distance between the toe piece and heel unit 100. The longitudinal pressure maintains the contact of the binding's toe piece and heel unit 100 throughout the ski counter-flex. The lower heel housing 27 applies longitudinal pressure to the ski boot via the upper heel housing 16 at surface 32 of heel cup 47. An internal shoulder on stop-lock/nut 29 prevents the nut 29 from falling out of its opening at the end of the lower heel housing 27. Longitudinal pressure increases substantially during ski flex. Such pressure is addressed by the longitudinal pressure spring biasing means that is comprised of elements 32, 29, 30, 31 within lower heel housing 27.

**[0043]** The lower heel housing 27 fits to and integrates with lower carriage 12 by flanges 28. Specifically, flanges 28a, 28b, on each side of the lower heel housing 27, mate with lower carriage 12.

**[0044]** Heel pad 13 includes low-friction element 14, low-friction surface 15, and bearing grease 56. Low-friction element 14 is disposed on the heel pad 13 and is lubricated with bearing grease 56. In an alternate embodiment low-friction surface 15 and bearing grease 56 is replaced with a low-friction surface 15 to which a boot can contact. Low-friction means 14 and 15 provide smooth lateral heel release during combined downward-vertical and lateral stresses, which mitigate torque about the femur and correspondingly strained ACL. Low-friction means 14 and 15 contribute to rapid re-centering of the heel of a boot during innocuous lateral heel loads.

**[0045]** The vector decoupler assembly 60 includes cantilevered plate 57, vector decoupler tongue 60a, top surface 61, and low-friction elements 58 and 59.

**[0046]** The cantilevered plate 57 joins to the moving lateral release cam element 17. The low friction elements 58 and 59 are made of a low-friction polymer, such as polytetrafluoroethylene (PTFE), or are made of other low-friction materials or surfaces that are already well known in the art. One side of the low-friction element 58 bonds to a mating surface (not shown). For example, the top-side of low-friction element 58 can be bonded to the bottom side of vector decoupler assembly 60, allowing the low friction element 58 to slide while rotating and translating laterally. The translation occurs with

the vector decoupler tongue 60a when a force is applied to the vector decoupler tongue 60a such that the vector decoupler tongue 60a is applied against top surface 61 of lower heel housing 27. Optionally, the bottom side of low-friction element 58 can be bonded to the top surface 61 of lower heel housing 27. Accordingly, the vector decoupler tongue 60 can rotationally and translationally slide laterally against low friction element 58. if the vector decoupler tongue is made of an aluminum die casting, a low friction coating (such as Teflon impregnated epoxy paint) is applied to the contact surfaces of the vector decoupler tongue 60a and the top surface 61 of the lower heel housing 27. Low friction coatings provide a low friction interface between the vector decoupler tongue 60 and the lower heel housing. If the vector decoupler tongue is made of injection molded plastic, the plastic material itself can be of a low coefficient of friction material without any coating, such as DuPont Delrin blended with PTFE, low-coefficient of friction grades of Nylon 12 or Nylon 66 or other low-coefficeint of friction / high impact at low-temperature grades of plastics that are already well known in the art.

**[0047]** In a similar way, the top-side of low-friction element 59 bonds to the bottom side of cantilevered plate 57 so that the vector decoupler tongue 60a can slide smoothly while rotating and translating in the general lateral direction. Or, optionally, the bottom side of low-friction element 59 can be bonded to the top surface of the vector decoupler tongue 60a while the top surface of the low-friction element 59 slides by rotating and translating against the bottom side of the cantilevered plate 57. If the vector decoupler tongue is made of die castable aluminum, low friction coatings, such as Teflon impregnated epoxy paint, are applied to the contact surfaces of the vector decoupler tongue 60a and the bottom surface of the cantilevered plate 57. The application provides a low-friction interface between the vector decoupler tongue 60a and the cantilevered plate 57.

**[0048]** The vector decoupler assembly 60 has sufficient width between 1 cm and 3 cm in the lateral direction. The augmented width resists a roll moment induced by a skier. The width also resists the stresses induced in the roll direction when skiing on snow or icy surfaces when a boot is forced to overturn laterally (roll), so that an upward unit force is applied to one side of the lateral region 33 of the underside of heel cup 47

thereby decoupling the effects of induced roll moments from the vertical release mechanism – minimizing inadvertent pre-release. The resistance supplied by the vector decoupler substantially decouples the roll moment from the moving lateral release cam surfaces 17c and interfacing lateral release cam surfaces 27a, thereby decoupling the effects of induced roll moments from the lateral heel release.

**[0049]** The vector decoupler assembly 60 allows free lateral translational and rotational movement of the moving lateral release cam 17 relative to the lower heel housing 27. The vector decoupler assembly 60 also allows free coupling of moving lateral release cam 17 against the mating cam surfaces 27a in the presence of lateral heel release loads. This occurs even when induced roll moments and upward force vectors are applied through the vector decoupler assembly 60. Free coupling is partially limited by friction generated between the sliding surfaces of low-friction elements 58 and 59 and the respective mating surfaces of components 60a and 61. Component 61 can be affixed to the lower heel housing 27 by band 18 that wraps around the lower heel housing 27.

**[0050]** In an alternate embodiment, cantilevered plate 61 is formed integrally with lower heel housing 27 as an aluminum die-casting or as an injection molded plastic part. The long length of vector decoupler tongue 60a reduces the unit compressive stresses at the far end of the tongue, between its interfacing components, low-friction element 59 and cantilevered plate 61 during induced forward bending moments. The long length of vector decoupler tongue 60 also serves to reduce the compressive stresses between interfacing components, low friction element 58, and the lower heel housing 27 during the latching action of stepping into the lower heel housing 27.

**[0051]** Vector decoupler mechanism 60 above is de-coupled from longitudinal pressure loads generated between moving lateral release cam 17 and lower heel housing 27, due to the longitudinally-open linkage between tongue 60a and cantilevered plate 57. In another embodiment, the side-to-side movement of the tongue 60a may be limited either on one side or both sides and substantially restricted on one side to block lateral heel release in one lateral direction to cut the probability of lateral heel pre-release in half while at the same time allowing release in the other lateral direction to provide for the

lateral stresses that cause the inward twisting abduction loads present in ACL ruptures, described in part by the phantom-foot injury mechanism/fall mechanics described above.

**[0052]** FIG. 3 illustrates a sectional top view of a lateral heel release mechanism. FIG. 4 shows the view of FIG. 3 in greater detail. Lateral release cam 17 is disposed next to matched cam interface 50. Both lateral release cam 17 and matched cam interface is disposed on top of lower carriage 12. Lateral release 340 includes lateral release cam 17, matched cam interface 50, spring biasing means 52, lateral heel release spring 35, tension shaft parts 36a and 36b, connector rod 41, shaft-rod 37, lateral release indicator washer 39, internal washer 40, integral opening 44, rectangular opening washer 42, and interface curved surfaces 51a, 51b, 51c, 51d, 51f, 51g.

**[0053]** Referring to FIGs. 2 and 4, the lateral heel release mechanism comprises lateral release cam surfaces 17c and lower heel housing lateral cam surfaces 27a, which are biased (i.e., forced together) by lateral heel spring-biasing component 52. Lateral spring biasing component 52 includes lateral heel release spring 35 that is placed in compression by the opposing force of the tension shaft parts, 36a and 36b (or by optional unitary tension shaft 36), and connector rod 41. These are supported at each tensioned two ends of the rod(s). At one end, shaft-rod 37, lateral release cam 17, and rectangular opening washer 42 support the equal and opposite compression against internal wall 43 of lower heel housing 27. At the other end, lateral release threaded cap 38, lateral release indicator washer 39, internal washer 40 support the equal and opposite compression of the tension rod(s). Internal opening 44 and the internal opening of rectangular opening washer 42 are both rectangular in shape to permit tension shaft 36a (or 36) to rotate and translate laterally upon the lateral movement of moving lateral release cam 17. While the vertical gaps of internal opening 44 and the vertical gaps of rectangular opening washer 42 are each smaller than their respective lateral gaps, such vertical gaps restrict the vertical movement of tension shaft 36a (or 36), so that upper heel housing 16 provides vertical movement of the ski binding heel unit about its pivot axis 18, rather than by the forced vertical movement of other elements.

**[0054]** Lateral heel release cam surfaces allow the lateral release cam 17 to both

rotate and translate relative to the lower heel housing 27, so that the heel area of the ski boot can displace laterally relative to the long axis of the ski. Boot displacement occurs when lateral loads are induced. Such lateral movement of the boot occurs across low-friction element 14 and heel pad top surface 15, as well as laterally against heel cup 47 boot-interface surfaces 32 and 33.

**[0055]** The lateral release cam surfaces 17c and 27a of the lateral release cam 17 and the mating cam surfaces 27a of the lower heel housing 27 displace relative to each other in a path described by their curved surfaces – specifically, curved surfaces 50a, 50b, 50c, 50d, 50f, 50g and their respective incremental interface curved surfaces 51a, 51b, 51c, 51d, 51f, 51g.

**[0056]** A partial lateral boot heel displacement occurs when the projected longitudinal-pressure center-of-effort between the boot and the heel cup 47 shifts laterally and the moving lateral release cam 17 tilts by rotating and translating a small amount, biased by lateral heel release spring 35. During such a partial lateral boot heel displacement, the opposing curved cam surfaces 50a, 50b, 50c, 50d, 50f, 50g move by translating and rotating (tilting) from their at-rest position to the next point of cam contact 50c and 51c, biased by lateral heel release spring 35. Accordingly, cam surfaces 50b and 51b space apart the "a-a" (as in 50a and 51a) surfaces from the "c-c" surfaces to provide an incremental lever arm. The incremental lever arm permits lateral translational and rotational movement of 17 relative to 27a. The at-rest position is defined to be when the surfaces on the symmetrically opposite side of the lower heel housing 27 are touching each other. For example, the at-rest position occurs when surfaces 50a and 51a are contacting each other.

**[0057]** As the heel of the boot continues to move laterally and lateral release cam 17 rotates and translates more to the point where cam surfaces "c-c" touch, a reverse-polarity lever-arm is generated that vector-adds to the spring bias effect of 52. The resultant incrementally abates the rotational and translational movement of lateral release cam 17. The abatement acts to re-center lateral release cam 17 toward its at-rest position, thereby providing incremental retention in the advent of large amounts of longitudinal



pressure between the boot and lateral release cam 17, which would otherwise cause inadvertent pre-release. If the lateral load at the heel persists in magnitude and/or duration, the boot's instant center of effort of longitudinal pressure then shifts outside of cam contact surfaces "c-c" to release the ski from the boot quickly and efficiently as is the case with ACL injury producing loads.

**[0058]** A similar benefit results if a load continues to persist in magnitude and duration while lateral release cam 17 continues to translate and rotate past the boot's projected longitudinal pressure shifts "outside" of cam contact surface "e-e." This reverses the polarity of the lever arm that acts perpendicular to the boot's projected center of effort of longitudinal pressure, thereby vector-subtracting from spring biasing means 52 to precipitate efficient release. Cam surfaces "f-f" begin to separate as cam surfaces "g-g" contact one another.

**[0059]** Finally, when cam surfaces "g-g" contact and the boot's projected instant center of longitudinal pressure shifts "outside" of cam surface contact point "g-g", the perpendicular lever arm finally reverses polarity again to vector-subtract from the spring bias 52, causing the moving lateral release cam 17 to rotate and translate toward lateral heel release.

**[0060]** The novel incremental vector additions and subtractions along the progressive cam surfaces that progress from cam surfaces "a-a" to cam surfaces "g-g" as described above, are also progressively effected by the increasing overall lateral lever arm generated between those cam contact surfaces and the reaction force of spring bias 52 applied at the instant-center-of-effort of shaft-rod 37. This arrangement makes lateral pre-release incrementally more difficult, the maximum point of release being a function of the exact spring constant of lateral heel spring 35, the amount of compression of spring 35 as controlled by lateral release threaded cap 38 (as indicated in lateral release level windows 53 on each side of lower heel housing 27). The maximum point of release is off-set by the incrementally decreasing longitudinal distance of the lever arm, between the lateral instant-center-of-contact of the side of the boot's heel and the lateral heel cup surface 54, to the instant-point of surface-contact on the progressive cam surfaces 17c

and 27a.

**[0061]** If the moving progressive cam 17 were to rotate only about a central pivot located over the center of the ski, the alpine binding heel unit 10 would be too biased toward release and skiers would suffer from pre-release. On the other hand, if the moving progressive can were to rotate only about opposing cam surfaces "g-g" (as in 50g and 51g) the alpine binding heel unit would be too biased toward retention and skiers would suffer from ruptured ACL injuries. The progressive cams thus strike a decisive balance over release and retention by incrementally reversing polarity between release and retention during the course of lateral heel movement when moving cam 17 rotates and translates accordingly.

**[0062]** The kinematics of the incremental lateral release path of the boot relative to the ski can be controlled by the geometry of the mating cam surfaces as noted above. Adjustments to control the point of maximum lateral release can be adjusted by the compressive movement of lateral release threaded cap 38.

**[0063]** In one embodiment, a compressible elastomeric material 54 such as Dupont Crayton is placed between lateral release cam surfaces 27a and 17c to minimize the contamination effects of ice, mud and road-salt. Alternatively, a very highly elastic membrane 55 can be placed at the open end of the surfaces as a barrier to such contaminants. In yet another embodiment, the gap between the surfaces can remain open and exposed so that visual inspection of the gap can be easily performed by skiers or service technicians and because of the curved end surface of 51h. The curved end serves as a snow, ice and road-salt deflector to mitigate the practical effects of such environmental exposure. The entire lateral release mechanism including components 38, 39, 40, can be easily removed from parts 35, 36a, 36b, 41, 42, 37 and 17 to allow for periodic cleaning of the lateral release cam surfaces 17c and 27a. Snow pack does not build-up and compress into ice in the gap between 17c and 27a because the lateral orientation of the gap is at right angles to the direction of travel through the snow, mitigating the practical and important concerns about snow-pack and ice formation and its interference with lateral heel release.

**[0064]** Low-friction journals, or integral surfaces 62 and 63 of moving lateral release cam 17 further serve to decouple induced roll and vertical loads when acting against surfaces 49 and 64. They are, however, limited in their structural capacity due to the high unit stresses imposed on these surfaces. Such stresses exist because of the necessary restricted longitudinal lengths of elements 62, 63, 49 and 64, due to the need for the lower heel housing 27 to be compact in overall size, thereby causing the vector decoupler mechanism 60 to act in concert together with elements 62, 63, 49 and 64 to provide counter resistive fulcrum points as well as sliding bearing interface surfaces.

**[0065]** Other aspects, modifications, and embodiments are within the scope of the following claims.

What is claimed is:

- 1 1. A vector decoupling assembly for separating and isolating two or more force  
2 vectors applied to a safety binding securing a heel portion of a ski boot to a ski,  
3 comprising:  
4 a lower heel assembly attached to the ski;  
5 an upper heel assembly coupled to the lower heel assembly and having a lateral  
6 release assembly for applying lateral securing pressure to the ski boot;  
7 a linkage element fixedly attached to the lateral release assembly;  
8 wherein the linkage element, the first surface and the second surface cooperate to  
9 limit motion of the lateral release assembly to within a predetermined region within a  
10 plane defined by the longitudinal and horizontal axes of the ski.

ALPINE SKI BINDING HEEL UNIT

ABSTRACT

Ski binding heel unit includes lateral release cams and a vector decoupler mechanism that provide lateral shear release of the heel of a ski boot from a ski. The ski binding heel unit includes an independent vertical heel release mechanism, independent lateral release mechanism and a forward pressure compensator. The lateral release cams have laterally outwardly flaring contact points. The vector decoupler mechanism restricts heel unit lateral rotation and translation to a control path. The shape of the lateral release cams dictates the control path. The vector decoupler mechanism redirects the non-lateral forces without effecting the vertical heel release, lateral heel release or forward pressure compensator. The lateral release cams and vector decoupler mechanism avert non-lateral, benign loads from the lateral heel release, and avert non-vertical, benign loads from the vertical heel release thereby reducing the incidence of inadvertent pre-release of a boot from a ski.

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<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	2003127.00122US3	
		Application Number		
Title of Invention	ALPINE SKI BINDING HEEL			
<p>The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.</p> <p>This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.</p>				

## Secrecy Order 37 CFR 5.2

<input type="checkbox"/>	Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
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## Applicant Information:

<b>Applicant 1</b>				
<b>Applicant Authority</b>		<input checked="" type="radio"/> Inventor <input type="radio"/> Legal Representative under 35 U.S.C. 117 <input type="radio"/> Party of Interest under 35 U.S.C. 118		
<b>Prefix</b>	<b>Given Name</b>	<b>Middle Name</b>	<b>Family Name</b>	<b>Suffix</b>
Mr.	Richard	J.	HOWELL	
<b>Residence Information (Select One)</b> <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service				
<b>City</b>	Stowe	<b>State/Province</b>	VT	<b>Country of Residence</b> US
<b>Citizenship under 37 CFR 1.41(b)</b>		US		
<b>Mailing Address of Applicant:</b>				
<b>Address 1</b>		782 South Main Street		
<b>Address 2</b>				
<b>City</b>	Stowe	<b>State/Province</b>	VT	
<b>Postal Code</b>	05672	<b>Country</b>	US	
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the <b>Add</b> button. <div style="text-align: right;"> <input type="button" value="Add"/> </div>				

## Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
<input type="checkbox"/> An Address is being provided for the correspondence Information of this application.			
<b>Customer Number</b>	23483		
<b>Email Address</b>		<input type="button" value="Add Email"/>	<input type="button" value="Remove Email"/>

## Application Information:

<b>Title of the Invention</b>	ALPINE SKI BINDING HEEL		
<b>Attorney Docket Number</b>	2003127.00122US3	<b>Small Entity Status Claimed</b> <input checked="" type="checkbox"/>	
<b>Application Type</b>	Nonprovisional		
<b>Subject Matter</b>	Utility		
<b>Suggested Class (if any)</b>		<b>Sub Class (if any)</b>	
<b>Suggested Technology Center (if any)</b>	N/A		
<b>Total Number of Drawing Sheets (if any)</b>	4	<b>Suggested Figure for Publication (if any)</b>	1

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	2003127.00122US3
		Application Number	
Title of Invention	ALPINE SKI BINDING HEEL		

### Publication Information:

<input type="checkbox"/>	Request Early Publication (Fee required at time of Request 37 CFR 1.219)
<input type="checkbox"/>	<b>Request Not to Publish.</b> I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application <b>has not and will not</b> be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

### Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.			
Please Select One:	<input checked="" type="radio"/> Customer Number	<input type="radio"/> US Patent Practitioner	<input type="radio"/> Limited Recognition (37 CFR 11.9)
Customer Number	23483		

### Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.					
Prior Application Status	Pending		<a href="#">Remove</a>		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation of	12001436	2007-12-11		
Prior Application Status	Patented		<a href="#">Remove</a>		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
12001436	Division of	10780455	2004-02-17	7318598	2008-01-15
Prior Application Status	Pending		<a href="#">Remove</a>		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
10/780,455	non provisional of	60448645	2003-02-18		
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the <b>Add</b> button.					

### Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).
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<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	2003127.00122US3
		Application Number	
Title of Invention	ALPINE SKI BINDING HEEL		

			<a href="#">Remove</a>
Application Number	Country <sup>1</sup>	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
			<input type="radio"/> Yes <input checked="" type="radio"/> No
Additional Foreign Priority Data may be generated within this form by selecting the <b>Add</b> button.			

### Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.			
<b>Assignee 1</b>			
If the Assignee is an Organization check here. <input checked="" type="checkbox"/>			
Organization Name	Kneebinding, Inc.		
<b>Mailing Address Information:</b>			
Address 1	782 Mountain Road		
Address 2	P.O. Box 1416		
City	Stowe	State/Province	VT
Country	US	Postal Code	05672-4650
Phone Number		Fax Number	
Email Address			
Additional Assignee Data may be generated within this form by selecting the <b>Add</b> button.			

### Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.					
<b>Signature</b>	/Ronald R. Demsher/			Date (YYYY-MM-DD)	2011-01-04
First Name	Ronald	Last Name	Demsher	Registration Number	42478

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
<b>EFS ID:</b>	9159803
<b>Application Number:</b>	12984293
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2029
<b>Title of Invention:</b>	ALPINE SKI BINDING HEEL UNIT
<b>First Named Inventor/Applicant Name:</b>	Richard J. Howell
<b>Customer Number:</b>	23483
<b>Filer:</b>	Ronald R. Demsher./maureen divito
<b>Filer Authorized By:</b>	Ronald R. Demsher.
<b>Attorney Docket Number:</b>	2003127.122US3
<b>Receipt Date:</b>	04-JAN-2011
<b>Filing Date:</b>	
<b>Time Stamp:</b>	16:22:52
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Drawings-only black and white line drawings	2003127_122US3_Drawings.pdf	319956 f4a6de4ac983325319785567a377bed6155fcd2	no	4

### Warnings:

### Information:

2	Oath or Declaration filed	2003127_122US3_Declaration.pdf	139895 78de9d7a0d6b0bddedbab9ea8b42503723241bdd	no	2
Warnings:					
Information:					
3	Power of Attorney	2003127_122US3_POA.pdf	89356 98bd6740b7cc40ba441fada1a4715eeb122500cf	no	1
Warnings:					
Information:					
4	Assignee showing of ownership per 37 CFR 3.73(b).	2003127_122US3_373bStmt.pdf	79031 f3e2962f850513db500a08ba0b0b029639684b22	no	1
Warnings:					
Information:					
5		2003127_122US3_specification_010411.pdf	1335513 11806854780f31bce60640939a79f4e8c59f9ffa	yes	20
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	18	
	Claims		19	19	
	Abstract		20	20	
Warnings:					
Information:					
6	Application Data Sheet	2003127_122US3_ADS_010411.pdf	433376 15cd0bd1e634b6f70551531eb162bbe7457045787	no	4
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
Total Files Size (in bytes):			2397127		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

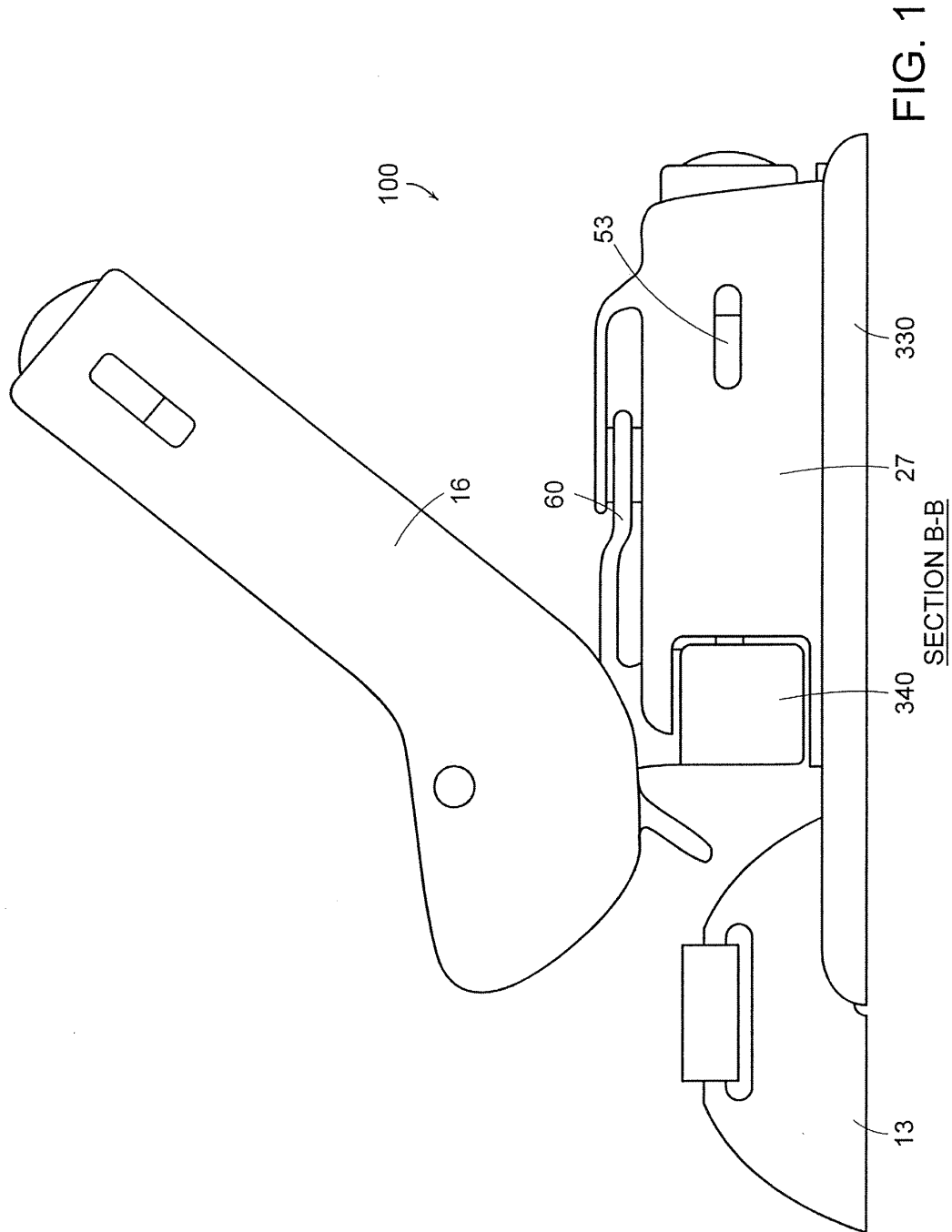
**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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2/4

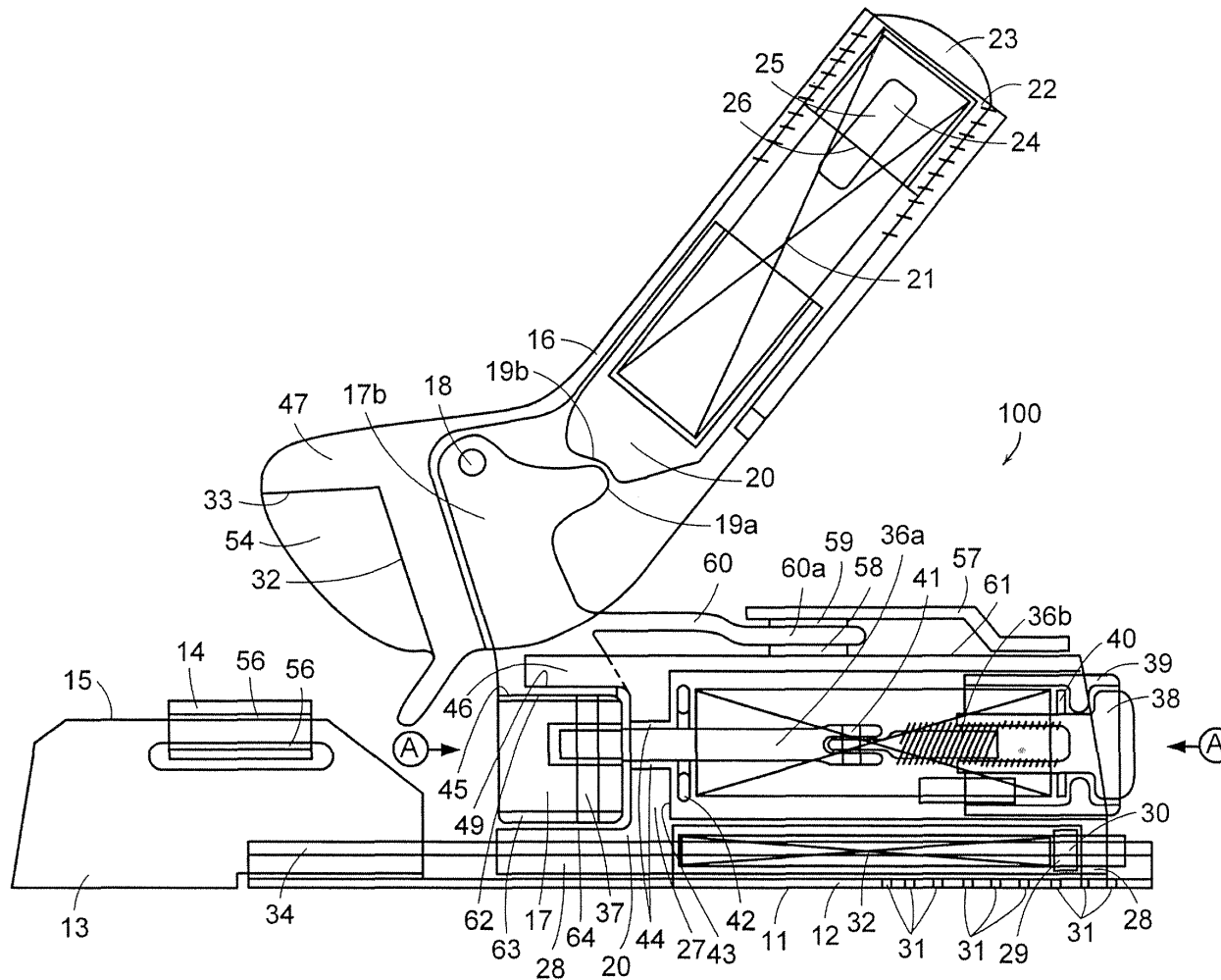


FIG. 2

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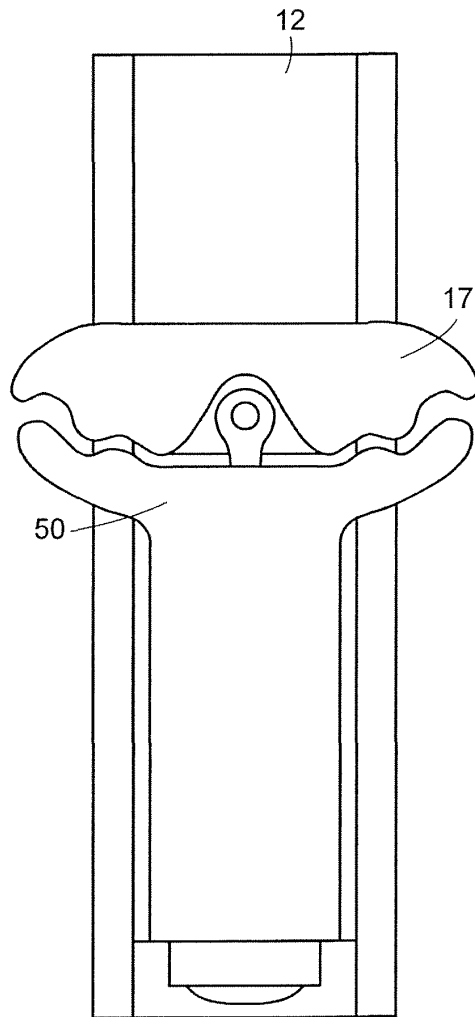
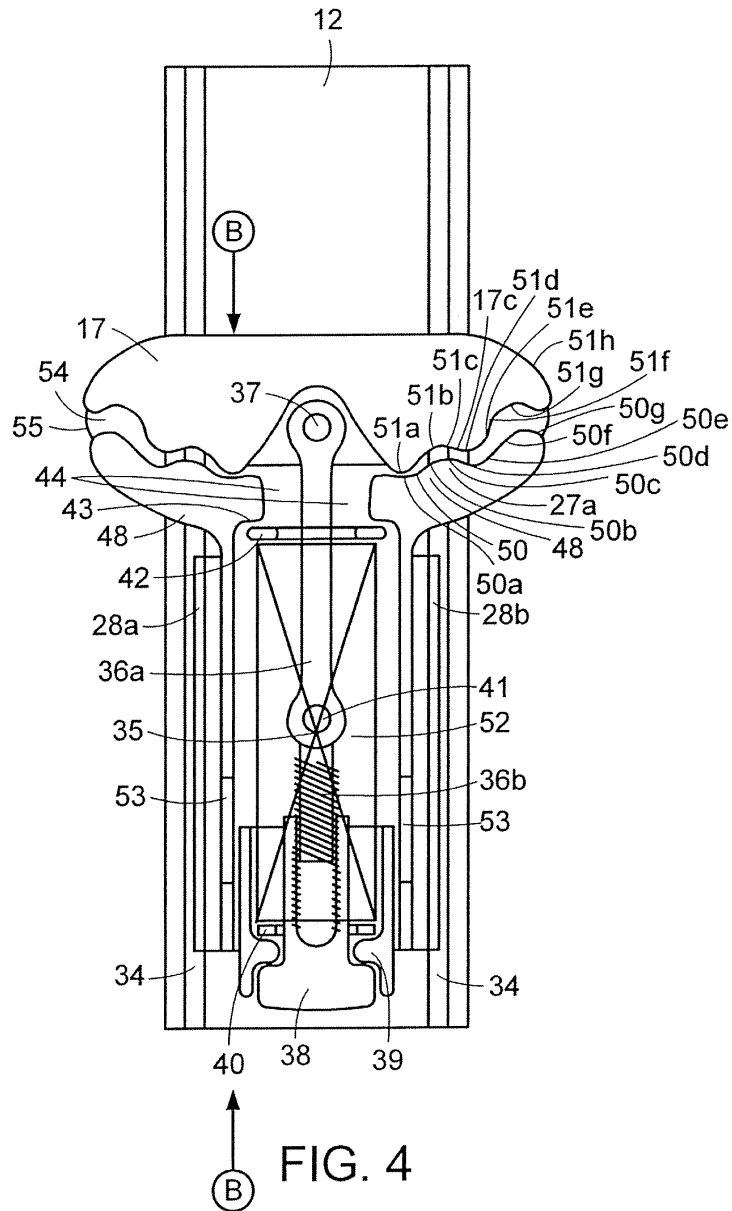


FIG. 3

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# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention ALPINE SKI BINDING HEEL UNIT

As the below named inventor(s), I/we declare that:

This declaration is directed to:

☐ The attached application, or

☒ Application No. 12/001,436, filed on 12/11/2007,

☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

## FULL NAME OF INVENTOR(S)

Inventor one: Richard J. Howell

Signature:  Citizen of: US

Inventor two: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

Inventor three: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

Inventor four: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

☐ Additional inventors or a legal representative are being named on \_\_\_\_\_ additional form(s) attached hereto.

NONE

*[Signature]*  
MARCH 10, '03

PTO/SB/01A (09-04)

Approved for use through 07/31/2006. OMB 0651-0032  
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of
Inventor five: _____ Signature: _____ Citizen of: _____	
Inventor six: _____ Signature: _____ Citizen of: _____	
Inventor seven: _____ Signature: _____ Citizen of: _____	
Inventor eight: _____ Signature: _____ Citizen of: _____	
Inventor nine: _____ Signature: _____ Citizen of: _____	
Inventor ten: _____ Signature: _____ Citizen of: _____	
Inventor eleven: _____ Signature: _____ Citizen of: _____	
Inventor twelve: _____ Signature: _____ Citizen of: _____	
Inventor thirteen: _____ Signature: _____ Citizen of: _____	
Inventor fourteen: _____ Signature: _____ Citizen of: _____	
Inventor fifteen: _____ Signature: _____ Citizen of: _____	