

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 July 2007 (26.07.2007)

PCT

(10) International Publication Number
WO 2007/084580 A3

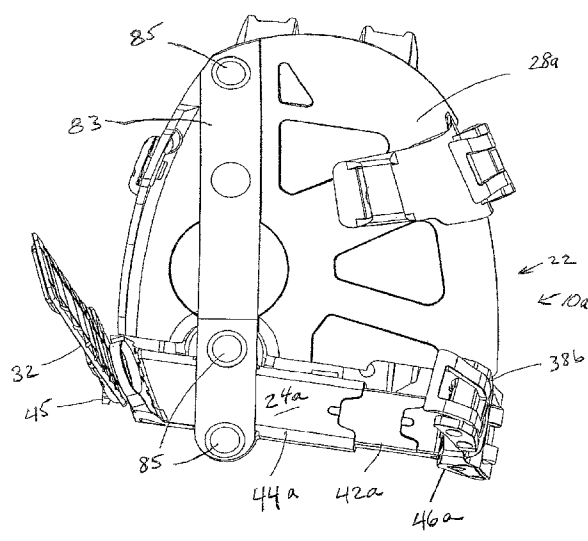
- (51) International Patent Classification:
A63C 13/00 (2006.01) A43B 5/04 (2006.01)
- (21) International Application Number:
PCT/US2007/001266
- (22) International Filing Date: 17 January 2007 (17.01.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/334,056 17 January 2006 (17.01.2006) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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- Published:**
 - with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 19 June 2008

(54) Title: SNOWSHOE BINDING WITHOUT HEEL STRAP



(57) Abstract: A snowshoe binding (10) engages the sole of the user's boot (51) in a region between the arch and the widest part of the sole, gripping the sole laterally and sufficiently firmly that the boot will not pull out of the binding during use of the snowshoe, even in the absence of a heel strap. The arch area of the boot typically is narrower in width than the ball of the foot, providing a rearwardly tapering region for positive engagement against pulling back of the boot, in the binding. By engaging the boot at the sole, the binding can put pressure on the boot not felt by the user. In one form the sole engaging binding device has a width adjustment with a sliding element (42), and the firmly clamping sole engagement preferably is accomplished with a cam (46) that engages when a strap (32) is tightened. An efficient buckle and strap are also disclosed.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/001266

A. CLASSIFICATION OF SUBJECT MATTER
 INV. A63C13/00 A43B5/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 A63C A43B A43C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
 EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 052 922 A (BLECK JAMES H [US]) 25 April 2000 (2000-04-25)	1, 15, 16, 25
Y	column 3, line 60 - column 5, line 8; figures 1, 4, 5 column 5, line 58 - column 6, line 35	8, 20, 24
Y	US 6 694 646 B2 (MESSMER NATHAN J [US] ET AL MESSMER NATHAN J [US] ET AL) 24 February 2004 (2004-02-24). figure 1	8, 20
Y	US 2 317 647 A (OSCAR SIMUNDS) 27 April 1943 (1943-04-27) figure 2	24
A	US 1 570 791 A (GEORGE SOLARZ) 26 January 1926 (1926-01-26) figures 1-3	1, 25
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Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 3 September 2007	Date of mailing of the international search report 22/04/2008
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Murer, Michael

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/001266

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 720 927 A (ABEGG SHERMAN T [US]) 26 January 1988 (1988-01-26) figure 2	1, 25

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/001266

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-25

A binding that firmly grips a user's boot to retain the boot in the binding without the need for a heel strap comprising blocking means connected to the footbed for laterally engaging the boot at the side of the sole where the sole is narrower than in the ball of the foot area

2. claims: 26-28

A binding for a snowshoe including at least one strap including a cam lock buckle

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/001266

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
US 6052922	A	25-04-2000	NONE	
US 6694646	B2	24-02-2004	WO 03056961 A1 US 2003126766 A1	17-07-2003 10-07-2003
US 2317647	A	27-04-1943	NONE	
US 1570791	A	26-01-1926	NONE	
US 4720927	A	26-01-1988	CA 1294994 C	28-01-1992