



(12) **United States Design Patent**
Joseph

(10) **Patent No.:** **US D663,850 S**
(45) **Date of Patent:** **** Jul. 17, 2012**

- (54) **LONG THUMB SPICA BRACE**
- (75) Inventor: **Mark Joseph**, Aspen, CO (US)
- (73) Assignee: **Exos Corporation**, Arden Mills, MI (US)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/368,155**
- (22) Filed: **Aug. 18, 2010**
- (51) **LOC (9) Cl.** **24-01**
- (52) **U.S. Cl.** **D24/190**
- (58) **Field of Classification Search** D24/189-190;
602/3-7, 13, 16, 20-22, 60, 64-65; D29/120.1,
D29/121.1, 113; 128/877, 878, 879, 881,
128/882, 892, DIG. 19; 473/59, 62, 213;
2/16, 20, 59, 159, 161.1
See application file for complete search history.

- 4,006,741 A 2/1977 Arluck
- 4,019,505 A 4/1977 Wartman
- 4,136,686 A 1/1979 Arluck
- 4,169,469 A 10/1979 Arluck
- 4,193,395 A 3/1980 Gruber
- 4,235,228 A 11/1980 Gaylord
- 4,240,415 A 12/1980 Wartman
- (Continued)

FOREIGN PATENT DOCUMENTS

- EP 0401883 A1 12/1990
- (Continued)

OTHER PUBLICATIONS

Application and File History for U.S. Appl. No. 29/368,156, filed Aug. 18, 2010. Inventor: Joseph.

(Continued)

Primary Examiner — Susan E Krakower
(74) *Attorney, Agent, or Firm* — Patterson Thuent Christensen Pedersen, P.A.

(56) **References Cited**

U.S. PATENT DOCUMENTS

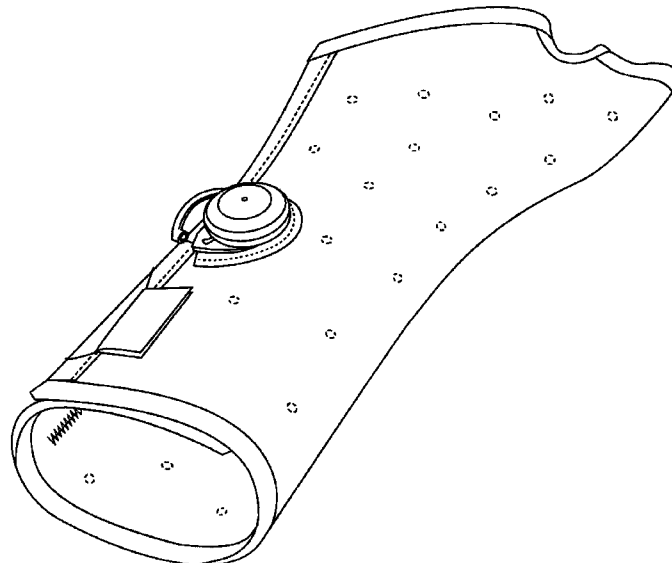
57,283 A	8/1866	Brown	
482,647 A *	9/1892	Obear	2/158
975,734 A	11/1910	Tebeau	
1,082,542 A	12/1913	Manson	
1,360,840 A *	11/1920	White	2/16
1,471,948 A *	10/1923	Cox et al.	602/22
1,583,606 A	5/1926	Roussel	
2,070,810 A	2/1937	Saling	
2,181,689 A	11/1939	Bell	
2,206,404 A *	7/1940	Jones	602/21
2,554,337 A	5/1951	Lampert	
2,736,314 A	2/1956	Hale	
2,759,475 A	8/1956	Swaay	
3,320,950 A	5/1967	McElvenny	
3,420,231 A	1/1969	Edenbaum	
3,490,444 A	1/1970	Larson	
3,692,023 A	9/1972	Phillips et al.	
3,896,843 A	7/1975	Millar et al.	
3,906,943 A	9/1975	Arluck	

- (57) **CLAIM**
The ornamental design for a long thumb spica brace, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a long thumb spica brace of the present invention;
 FIG. 2 is a front perspective view from the opposing angle;
 FIG. 3 is a side perspective view; and,
 FIG. 4 is a rear perspective view.
 It is understood that the broken lines on the surface of the claimed design indicates stitch lines which form part of the claimed design, while the circular elements and the zigzag element on the surface of the claimed design indicated with broken lines form no part of the claimed design.

1 Claim, 4 Drawing Sheets



US D663,850 S

Page 2

U.S. PATENT DOCUMENTS

D259,955	S	7/1981	Helfferich	
4,286,586	A	9/1981	Potts	
4,316,457	A	2/1982	Liegeois	
D266,288	S	9/1982	Coon	
4,427,002	A	1/1984	Baron et al.	
4,442,834	A	4/1984	Tucker et al.	
4,454,873	A	6/1984	Laufenberg et al.	
4,471,993	A	9/1984	Watson	
4,473,671	A	9/1984	Green	
4,483,333	A	11/1984	Wartman	
4,531,241	A	7/1985	Berger	
4,572,167	A	2/1986	Brunswick	
4,584,993	A	4/1986	Nelson	
4,600,618	A	7/1986	Raychok, Jr. et al.	
D287,640	S	1/1987	Primiano	
4,661,535	A	4/1987	Boroff	
4,765,319	A	8/1988	Finnieston et al.	
4,770,299	A	9/1988	Parker	
4,784,123	A	11/1988	Robeson	
4,912,174	A	3/1990	Grouiller	
RE34,714	E	8/1994	Burns et al.	
5,364,693	A	11/1994	Moren et al.	
D357,745	S	4/1995	Radwell	
5,415,622	A	5/1995	Kelley	
5,520,529	A	5/1996	Heckel	
D373,639	S	9/1996	McKie	
5,624,386	A	4/1997	Taylor et al.	
5,752,926	A	5/1998	Larson et al.	
5,769,804	A	6/1998	Harris et al.	
5,807,291	A	9/1998	Larson et al.	
5,830,167	A	11/1998	Jung	
D405,180	S	2/1999	Reina	D24/190
5,882,322	A	3/1999	Kim et al.	
5,934,599	A	8/1999	Hammerslag	
5,982,285	A	11/1999	Bueche et al.	
6,042,557	A	3/2000	Ferguson et al.	
6,056,713	A	5/2000	Hayashi	
6,093,161	A	7/2000	Vlaeyen et al.	
6,110,134	A	8/2000	Clark, Jr. et al.	
6,186,966	B1	2/2001	Grim et al.	
6,202,953	B1	3/2001	Hammerslag	
6,289,558	B1	9/2001	Hammerslag	
6,322,529	B1	11/2001	Chung	
6,325,772	B1	12/2001	Scheuermann et al.	
6,358,220	B1	3/2002	Langen et al.	
D463,565	S	9/2002	Slautterback	D24/190
6,520,925	B1	2/2003	Thibodo, Jr.	
D473,653	S	4/2003	Weaver, II et al.	
D477,088	S	7/2003	Brown et al.	
D477,409	S	7/2003	Mills et al.	
6,663,581	B1	12/2003	Calabrese	
D496,465	S	9/2004	Weaver, II	
6,843,190	B1	1/2005	LaPierre-McAfee	
6,893,410	B1	5/2005	Hely	
6,960,176	B1	11/2005	Hely et al.	
7,001,348	B2	2/2006	Garth et al.	

7,056,298	B1	*	6/2006	Weber	602/22
7,182,741	B2		2/2007	Porrata et al.	
7,204,817	B1		4/2007	Toronto et al.	
D558,883	S		1/2008	Ortiz	
D565,189	S		3/2008	Gramza et al.	
7,399,288	B2		7/2008	Chao	
D580,064	S		11/2008	Lin et al.	
D580,555	S		11/2008	Lin et al.	
7,470,243	B2		12/2008	Garth	
D584,822	S		1/2009	Weber	
7,591,050	B2		9/2009	Hammerslag	
7,597,671	B2		10/2009	Baumgartner et al.	
7,645,250	B2	*	1/2010	Koby et al.	602/21
D617,464	S	*	6/2010	Weaver et al.	D24/190
7,727,172	B2		6/2010	Wang	
D626,242	S		10/2010	Sagnip et al.	
7,854,714	B1		12/2010	Weber et al.	
D632,401	S		2/2011	Stevens	
7,955,287	B2	*	6/2011	Frangi	602/22
2002/0095750	A1		7/2002	Hammerslag	
2002/0161114	A1		10/2002	Gunatillake et al.	
2003/0178404	A1		9/2003	Dimartino et al.	
2003/0204938	A1		11/2003	Hammerslag	
2004/0024337	A1		2/2004	Tseng et al.	
2005/0043664	A1		2/2005	Reaux	
2005/0273030	A1	*	12/2005	Koby et al.	602/60
2005/0281999	A1		12/2005	Hofmann et al.	
2006/0051402	A1		3/2006	Bogardus et al.	
2006/0129075	A1		6/2006	Scheinberg et al.	
2006/0155226	A1	*	7/2006	Grim et al.	602/6
2006/0156517	A1		7/2006	Hammerslag et al.	
2007/0004993	A1		1/2007	Coppens et al.	
2007/0077393	A1		4/2007	Chiang et al.	
2008/0060167	A1		3/2008	Hammerslag et al.	
2008/0060168	A1		3/2008	Hammerslag et al.	
2008/0066272	A1		3/2008	Hammerslag et al.	
2008/0066345	A1		3/2008	Hammerslag et al.	
2008/0066346	A1		3/2008	Hammerslag et al.	
2008/0082033	A1		4/2008	Ortiz	
2008/0083135	A1		4/2008	Hammerslag et al.	
2008/0262400	A1		10/2008	Clark et al.	
2008/0319362	A1		12/2008	Joseph	
2009/0204047	A1	*	8/2009	MacArthur	602/36
2010/0299959	A1		12/2010	Hammerslag et al.	
2011/0130694	A1		6/2011	Livolsi et al.	

FOREIGN PATENT DOCUMENTS

EP	0625342	A1	11/1994
WO	WO 2007035875	A1	3/2007

OTHER PUBLICATIONS

Application and File History for U.S. Appl. No. 29/368,157, filed Aug. 18, 2010. Inventor: Joseph.

Application and File History for U.S. Appl. No. 29/368,158, filed Aug. 18, 2010. Inventor: Joseph.

* cited by examiner

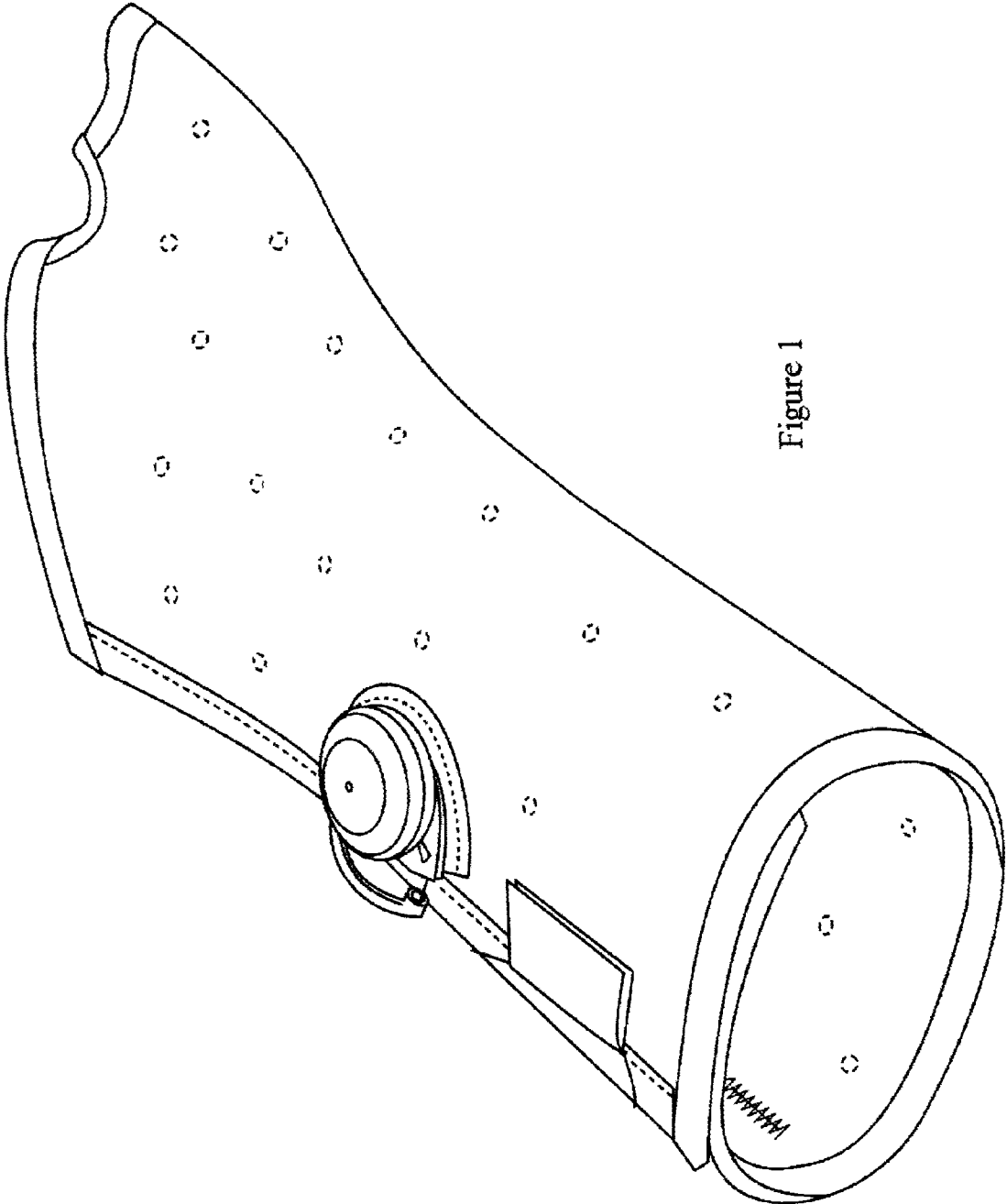


Figure 1

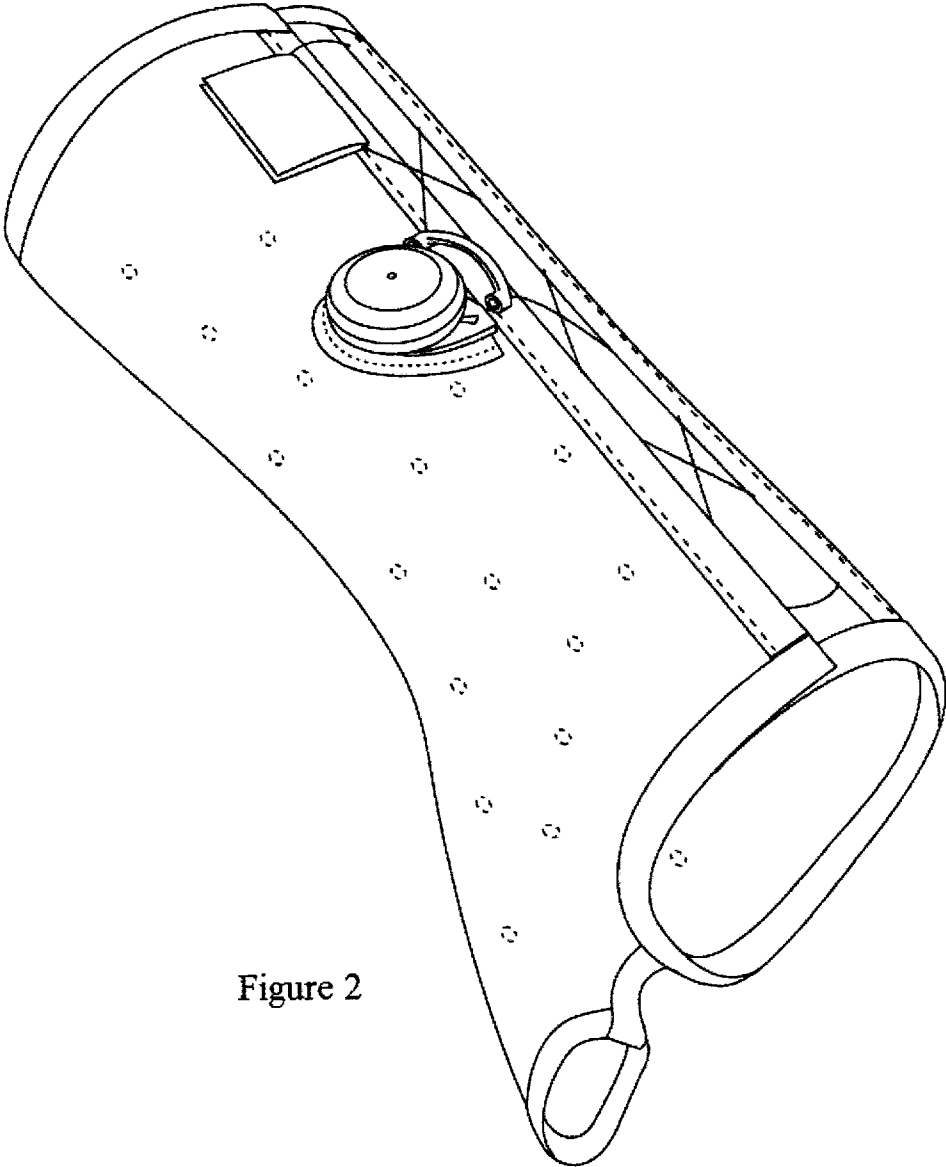


Figure 2

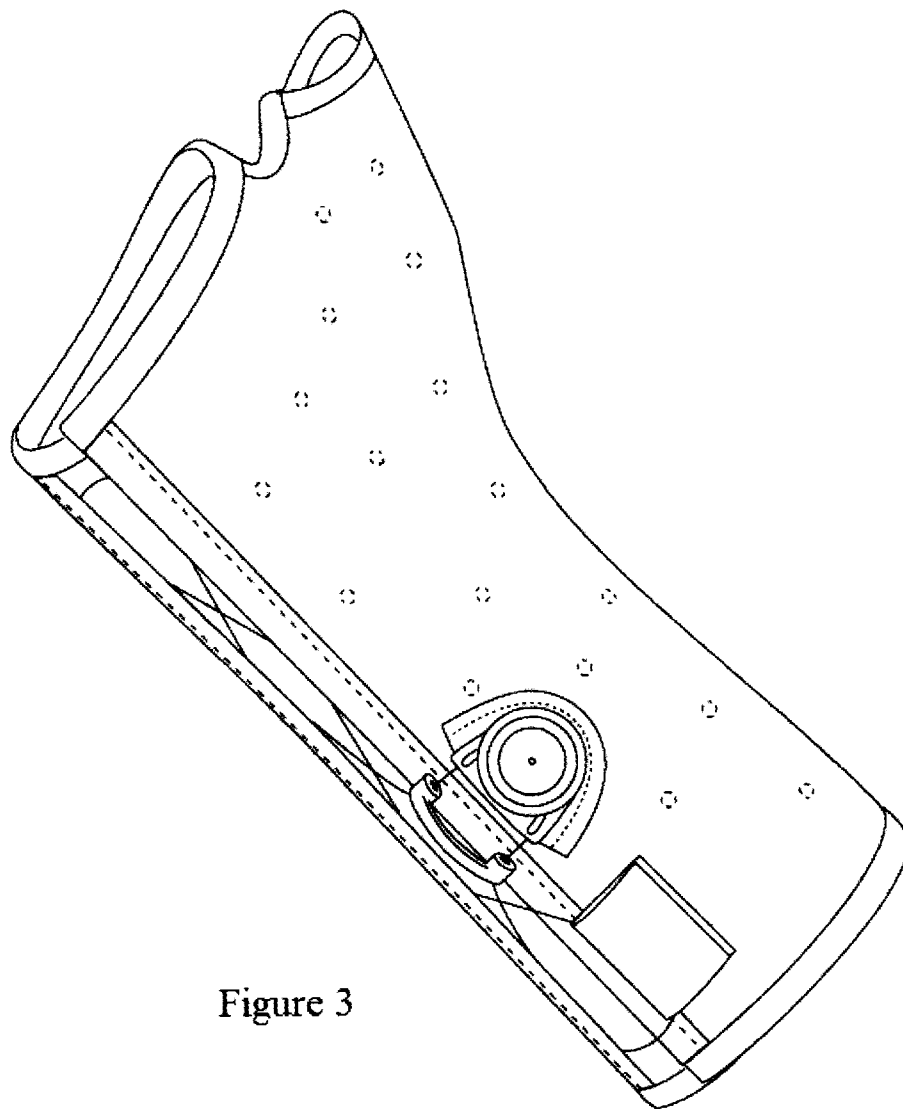


Figure 3

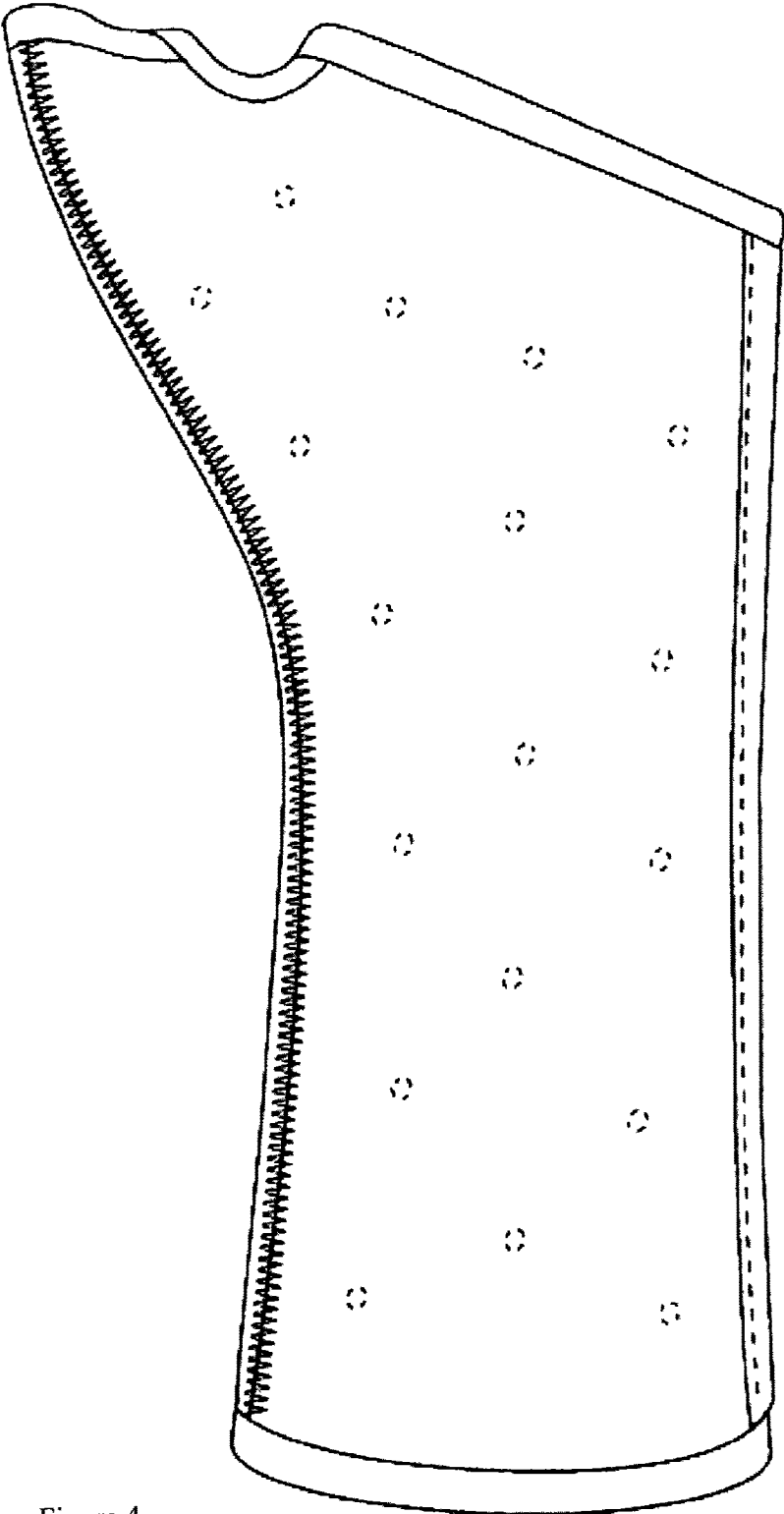


Figure 4

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D663,850 S
APPLICATION NO. : 29/368155
DATED : July 17, 2012
INVENTOR(S) : Mark Joseph

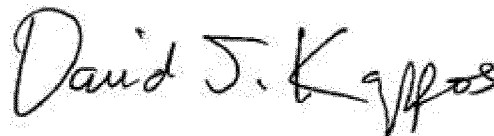
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page;

(73) Assignee: Exos Corporation, Arden Mills, MI;
should read (73) Assignee: -- Exos Corporation, Arden Hills, MN --

Signed and Sealed this
Fourth Day of September, 2012

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, slightly slanted style.

David J. Kappos
Director of the United States Patent and Trademark Office