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[Continued on next page]

(54) Title: APPARATUS FOR OPTICAL SCANNING OF THE FOOT FOR ORTHOSIS

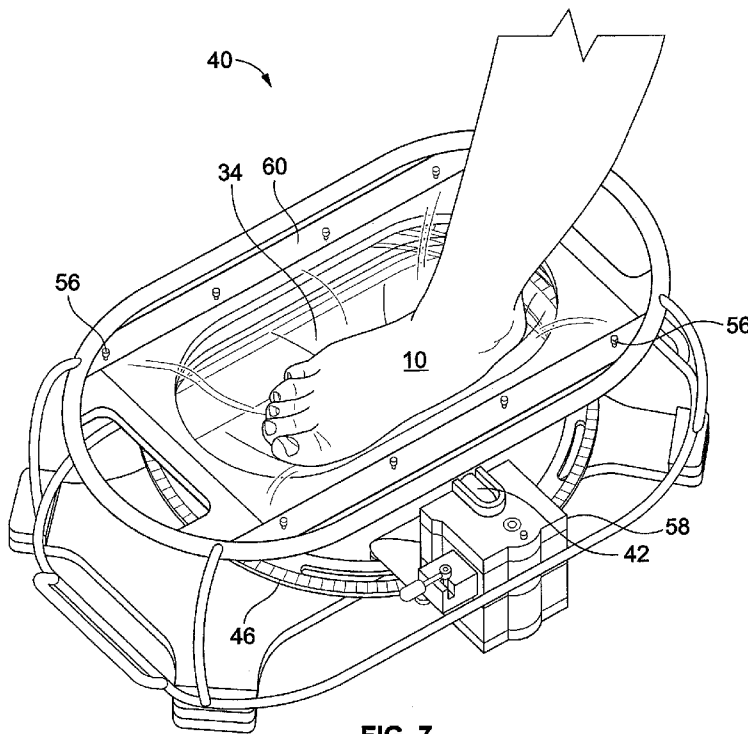


FIG. 7

(57) Abstract: An apparatus is provided which provides proper compression of the soft tissue to simulate the joint positions, force applications and proprioceptive feedback of the natural foot in mid- stance gait and captures the topographical surface of the foot for orthosis production. The apparatus provides proper soft tissue compression while allowing an optical scanner to visualize the modified topographical skin surface. The apparatus includes an optically- transparent membrane to deform the soft tissue of the foot and an optical scanner configured to scan the foot through the membrane.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 5/103 (2014.01)

USPC - 600/592

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)

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

USPC: 600/592, 587; 356/601

IPC: A61B 5/103, 5/107 CPC: A61B 5/1074, 1079, 107, 1036, 1038 (keyword limited; see below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase (All), Google (Patent, Web, Scholar); Search terms: optical, scan, transparent; flexible, membrane, sheet, film, barrier, polyethylene, LDPE, orthotic, orthosis, feet, foot, plantar, contour, deform, 3-D, sling, pocket, track

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2011/0313321 A1 (SANTAFE et al) 22 December 2011 (22.12.2011), entire document, especially Abstract, Fig 1-3, para [0025], [0027], [0035], [0049] and [0050]	1, 12, 14, 15, 17 ----- 2-4, 6-10, 11,13, 16, 18-20
X	US 2009/0076772 A1 (HINSHAW et al) 19 March 2009 (19.03.2009), entire document, especially Abstract, Fig 5, para [0073]-[0076]	1, 5, 12
Y	US 6,909,513 B1 (FUJITA et al) 21 June 2005 (21.06.2005), entire document, especially Fig 1, col 3, ln 30-33	2-4
Y	US 6,205,230 B1 (SUNDMAN et al) 20 March 2001 (20.03.2001), entire document, especially Fig 1	13, 16
Y	"Plastic Packaging Films & Laminates; Properties, Specifications & Purchasing," Workshop: Procurement of Packaging for Exports, Guyana, April 19-23, 2010	6-10, 11, 18-20
Y	US 6,592,699 B1 (MEHTA et al) 15 July 2003 (15.07.2003), entire document, especially col 1, ln 16-20, col 2, ln 25-31, Fig 3, col 5, ln 4-10	9, 11, 20
A	US 7,392,559 B2 (PETERSON) 01 July 2008 (01.07.2008), entire document	1-20
A	US 2001/0030297 A1 (MILIOTO) 18 October 2001 (18.10.2001), entire document	1-20
A	US 2006/0103852 A1 (KLAVENESS) 18 May 2006 (18.05.2006), entire document	1-20

 Further documents are listed in the continuation of Box C.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/087717 A1 (CARE-4-FEET INTERNATIONAL B V) 23 October 2003 (23.10.2003), entire document	1-20