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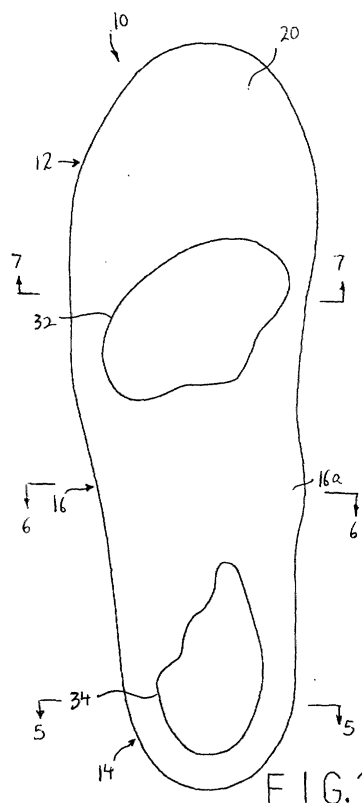
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(54) **Work insoles**

(57) A full length insole for use with footwear, is formed by a first layer including a forefoot portion extending at least to metatarsals of a foot, a heel portion, a mid portion connecting together the forefoot portion and the heel portion, the mid portion including a medial arch portion, an upper surface extending along the forefoot, mid and heel portions on which a person stands; and a lower surface extending along the forefoot, mid and heel portions, the lower surface including a shallow recess, the first layer being made of a material of a first hardness; a force line insert secured in the recess and having a shape that follows a greatest area of force of the foot on the upper surface during a normal stride, the force line insert being made of a material of a second hardness which is less than the first hardness; a forefoot pillow formed as a raised area at the upper surface at the forefoot portion to provide additional cushioning thereat and shaped to conform to a pressure area of the foot so as to include a front edge that extends forwardly to a greater extent at a medial side of the insole; and a heel pillow formed as a raised area at the upper surface at the heel portion to provide additional cushioning thereat and shaped to enhance progression of a gait to guide the foot toward the medial arch portion.



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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DE 35 04 363 A (CORNELIUS JOSEF) 14 August 1986 (1986-08-14) * the whole document *	1,12,17	A43B17/00 A43B17/14 A43B17/02
A	US 4 930 232 A (N. ENGLE) 5 June 1990 (1990-06-05) * the whole document *	1,12,17	
A,D	EP 0 147 024 A (B. CHAPNICK) 3 July 1985 (1985-07-03) * the whole document *	1,12,17	
A	US 4 823 483 A (B. CHAPNICK) 25 April 1989 (1989-04-25) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A43B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 2002	Examiner DECLERCK, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 1266

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11-02-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 3504363	A	14-08-1986	DE 3504363 A1	14-08-1986
US 4930232	A	05-06-1990	NONE	
EP 0147024	A	03-07-1985	US 4586273 A	06-05-1986
			AU 3515184 A	04-07-1985
			EP 0147024 A2	03-07-1985
			JP 60158803 A	20-08-1985
			US 4648923 A	10-03-1987
			US 4782605 A	08-11-1988
US 4823483	A	25-04-1989	NONE	