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(54) Title: COMPOUND FOR FLEX SOLE

(57) Abstract: The present invention discloses a compound and a method for a cushion pad that is bonded to an outsole without the need for glue or other adhesives. This cushion pad can be softer and more flexible than the outsole but can be similar enough in composition to be recyclable without having to separate it from the outsole. The compound can consist of a styrene-butadiene-styrene triblock copolymer, ethyl-vinyl-acetate, peroxide, a filler agent, and a blowing agent. The combination of these materials will form a high rubber content foam sheet that is very soft and shock adsorbing. This process can use the above compound to manufacture a rubber outsole with an integrated cushioning pad that can be manufactured in one step.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A43B 13/02, 13/18; 1/00
 US CL : 106/38; 12/142R, 146B, 142T; 36/28, 83, 103; 523/167

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)
 U.S. : 106/38; 12/142R, 146B, 142T; 36/28, 83, 103; 523/167

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3,485,787 A (HAEFELE et al) 23 December 1969.	1-35
A	US 5,756,195 A (ALLEN et al) 26 May 1998.	1-35
A	US 5,766,704 A (ALLEN et al) 16 June 1998.	1-35
A	US 5,985,383 A (ALLEN et al) 16 November 1999.	1-35
A	US 5,994,450 A (PEARCE) 30 November 1999.	1-35
A	US 6,367,172 B2 (HERNANDEZ) 09 April 2002.	1-35

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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