Title (en)
SHOE WITH SPRING-LIKE SOLE MEMBER

Publication
EP 0272082 B1 19920812 (EN)

Application
EP 87311016 A 19871215

Priority
- US 13130987 A 19871208
- US 94224586 A 19861215

Abstract (en)
[origin: EP0272082A2] A shoe, which is adapted for a particular type of activity, such as running, is provided with a flexible resilient member (13) interposed between an outer sole (12) and an inner sole (16) for storing and releasing energy during each running step. The flexible resilient member (13) is arranged to flex in the region of the ball of the foot of the wearer. whereby as the foot is flexed, energy is stored in the flexible resilient member, and as the foot leaves the ground, the flexible resilient member restores itself to its resting condition while releasing the stored energy in a manner which assists the running motion of the wearer,. The flexible resilient member may be formed of a fiber reinforced polymeric material, such as carbon fiber reinforced epoxy which has a directional flexure characteristic. A plurality of such directional layers of the material may be bonded to one another, so as to achieve a desired overall flexure characteristic which may have different longitudinal and transverse components. The flexure characteristic may be adapted for various wearer weights and running styles, as well as for characteristics of running surfaces.

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A43B 13/18

IPC 8 full level
A43B 13/04 (2006.01); A43B 5/06 (2006.01); A43B 13/12 (2006.01); A43B 13/18 (2006.01)

CPC (source: EP)
A43B 5/06 (2013.01); A43B 13/12 (2013.01); A43B 13/187 (2013.01)

Cited by
EP0947145A1; DE19914472C2; ES2053398A1; US5832634A; US5918338A; DE19919409C1; EP0548475A1; FR2685173A1; US6079125A; EP1048233A3; WO2017125676A1; US11272756B2; US10660399B2; EP1048233A2; USRE40474E; US6528140B1; US8826569B2; LT3640B; EP4140346A1

Designated contracting state (EPC)
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