

Title (en)

THREE DIMENSIONAL SHOE VAMP AIR CUSHION

Title (de)

DREIDIMENSIONALE LUFTPOLSTERUNG FÜR EIN SCHUHWERK

Title (fr)

COUSSIN D'AIR TRIDIMENSIONNEL POUR EMPEIGNE DE CHAUSSURES

Publication

EP 0989809 A4 20020911 (EN)

Application

EP 98909026 A 19980306

Priority

- US 9804481 W 19980306
- US 87445297 A 19970616

Abstract (en)

[origin: WO9857562A1] A three dimensional shoe vamp air cushion (1, 20) having an upper sheet and a lower sheet, with all peripheral edges sealed to form a hollow interior. An upper area of the air cushion is larger than the interior area, permitting the air cushion body to have three dimensions instead of two dimensions. The three dimensional shoe vamp air cushion has one or more air chambers and a similar curvature as the upper surface of a foot, so as to have excellent adaptability and shock absorbing characteristics.

IPC 1-7

A43B 23/26; **A43B 5/04**

IPC 8 full level

A43B 23/26 (2006.01)

CPC (source: EP)

A43B 23/029 (2013.01); **A43B 23/26** (2013.01)

Citation (search report)

- [A] US 5158767 A 19921027 - COHEN ERIC D [US], et al
- [A] US 5444926 A 19950829 - ALLEN BERNIE [US], et al
- [A] US 3372495 A 19680312 - FINN JOHN J
- [A] US 4217705 A 19800819 - DONZIS BYRON A [US]
- [A] US 4670995 A 19870609 - HUANG ING-CHUNG [TW]
- See references of WO 9857562A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 9857562 A1 19981223; AU 6690998 A 19990104; AU 726072 B2 20001026; CA 2292394 A1 19981223; CN 1199598 C 20050504; CN 1260690 A 20000719; EP 0989809 A1 20000405; EP 0989809 A4 20020911; RU 2180792 C2 20020327

DOCDB simple family (application)

US 9804481 W 19980306; AU 6690998 A 19980306; CA 2292394 A 19980306; CN 98806218 A 19980306; EP 98909026 A 19980306; RU 2000100809 A 19980306