

Title (en)

SHOE SOLE, SHOE AND ANTISLIP MEMBER

Title (de)

SCHUHSOHL E, SCHUH UND GLEITSCHUTZELEMENT

Title (fr)

SEMELLE DE CHAUSSURE, CHAUSSURE ET ÉLÉMENT ANTIDÉRAPANT

Publication

EP 3406156 A4 20190814 (EN)

Application

EP 16886431 A 20161104

Priority

- JP 2016010220 A 20160122
- JP 2016082768 W 20161104

Abstract (en)

[origin: EP3406156A1] A shoe sole is provided that allows continuous bracing from a moment immediately after the start of bracing and can exhibit excellent slip resistance for walking on a poor walking surface, e.g., an ice surface. On the shoe sole, a dynamic friction coefficient on the ice surface is higher than a maximum static friction coefficient on the ice surface. The dynamic friction coefficient on the ice surface is preferably at least 0.25. These conditions can be achieved by the shoe sole including, for example, a plurality of antislip protrusions formed downward with undersides of the antislip protrusions coming into contact with the ground, the antislip protrusions each including a funnel-shaped recessed portion formed on the underside of the antislip protrusion, each recessed portion including steps annularly formed on the inner surface of the recessed portion.

IPC 8 full level

A43B 13/22 (2006.01)

CPC (source: EP KR)

A43B 13/223 (2013.01 - EP); **A43B 13/26** (2013.01 - KR); **A43C 15/00** (2013.01 - KR)

Citation (search report)

- [XAI] US 2005034798 A1 20050217 - BRIGHT DONALD ANTHONY [US]
- [XI] DE 591148 C 19340117 - HERMANN SCHULZE
- [XA] WO 2015121884 A1 20150820 - CHIMINELLO DAMIANO [IT], et al
- [XI] US 3043025 A 19620710 - SEMON WILLIAM P
- [A] DE 2533622 A1 19770210 - DASSLER ADOLF
- See references of WO 2017126192A1

Cited by

EP3906798A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

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