

Title (en)
Closure system component

Title (de)
Schließsystemkomponente

Title (fr)
Composants de système de fermeture

Publication
EP 2746504 B1 20191106 (DE)

Application
EP 13197967 A 20131218

Priority
DE 102012025172 A 20121223

Abstract (en)
[origin: EP2746504A2] The component i.e. motor car lock (1a), has an impact arrangement absorbing momentum of a movement element, and comprising a plastics foam element that partially consists of a microcellular, open-cell plastics foam such as polyurethane foam, where the plastics foam element material is configured as PORON (RTM: Microcellular Urethane). The density of the plastics foam element material measured according to ASTM D 3574-95 Test A lies in a range of about 200-440 kilogram per cubic meter.

IPC 8 full level
E05B 77/38 (2014.01); **E05B 79/20** (2014.01); **E05B 81/06** (2014.01); **E05B 81/14** (2014.01); **E05B 81/24** (2014.01)

CPC (source: EP US)
E05B 77/02 (2013.01 - US); **E05B 77/38** (2013.01 - EP US); **E05B 79/20** (2013.01 - EP US); **E05B 81/06** (2013.01 - EP US); **E05B 81/14** (2013.01 - EP US); **E05B 81/25** (2013.01 - EP US); **Y10T 292/1043** (2015.04 - EP US)

Citation (examination)
US 5062385 A 19911105 - NISHIO YUKIO [JP], et al

Citation (opposition)
Opponent : Kiekert AG
• DE 102004027916 A1 20050317 - BROSE SCHLIESSSYSTEME GMBH [DE]
• US 5516266 A 19960514 - TALASKI EDWARD J [US]
• WO 2004101929 A2 20041125 - KIEKERT AG [DE], et al
• DE 10320457 A1 20041216 - KIEKERT AG [DE]
• DE 102006030732 B4 20131017 - JOHNSON CONTROLS GMBH [DE]
• BURCHARD KOHAUPT: "Praxiswissen Chemie für Techniker und Ingenieure, 5. Auflage", 1996
• "Polyurethane", WIKIPEDIA, 17 August 2012 (2012-08-17), XP055731881, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Polyurethane&oldid=106915258>
• PETER EYERER, PETER ELSNER, THOMAS HIRTH: "Die Kunststoffe und ihre Eigenschaften, 6. Auflage", 2005, pages: 267, XP055731887

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)
EP 2746504 A2 20140625; EP 2746504 A3 20160427; EP 2746504 B1 20191106; DE 102012025172 A1 20140626;
US 2014175812 A1 20140626

DOCDB simple family (application)
EP 13197967 A 20131218; DE 102012025172 A 20121223; US 201314137486 A 20131220