

Title (en)

ARTICLE MADE FROM A HEAVY PLASTIC MATERIAL

Title (de)

AUS EINEM SCHWEREN KUNSTSTOFFMATERIAL HERGESTELLTER ARTIKEL

Title (fr)

ARTICLE REALISE DANS UN MATERIAU PLASTIQUE LOURD

Publication

**EP 4251687 A1 20231004 (FR)**

Application

**EP 21801896 A 20211028**

Priority

- EP 20209440 A 20201124
- EP 2021079960 W 20211028

Abstract (en)

[origin: WO2022111936A1] The invention relates to an article made from a material comprising, by weight: a metal and/or ceramic filler present in a percentage greater than 50% and less than or equal to 85%, at least one polymer present in a percentage greater than or equal to 15% and less than or equal to 50%, optionally at least one coupling agent present in a percentage greater than or equal to 0% and less than 10%, characterised in that the polymer (4) is bonded to the filler (2) and optionally to the coupling agent (3) by one or more bonds chosen from a hydrogen bond, a coordinate bond and an ionic bond. The present invention also relates to a method for manufacturing this article by injection moulding or by 3D printing.

IPC 8 full level

**C08K 3/08** (2006.01); **B29C 64/141** (2017.01); **C08K 3/22** (2006.01); **C08K 3/28** (2006.01); **C08L 77/02** (2006.01); **G04B 15/00** (2006.01); **G04B 37/22** (2006.01)

CPC (source: EP KR US)

**C08J 5/042** (2013.01 - US); **C08J 5/043** (2013.01 - US); **C08J 5/046** (2013.01 - US); **C08J 5/10** (2013.01 - US); **C08K 3/04** (2013.01 - KR); **C08K 3/08** (2013.01 - EP); **C08K 3/22** (2013.01 - EP); **C08K 3/28** (2013.01 - EP); **C08K 5/544** (2013.01 - KR); **C08K 7/02** (2013.01 - KR); **C08K 7/06** (2013.01 - KR); **C08K 7/20** (2013.01 - KR); **C08K 9/06** (2013.01 - KR); **C08L 75/04** (2013.01 - KR); **C08L 77/02** (2013.01 - EP KR US); **G04B 37/225** (2013.01 - EP US); **C08J 2377/10** (2013.01 - US); **C08K 2003/2244** (2013.01 - EP); **C08K 2201/006** (2013.01 - EP)

Citation (search report)

See references of WO 2022111936A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4001356 A1 20220525**; CN 116457404 A 20230718; EP 4251687 A1 20231004; JP 2023550117 A 20231130; KR 20230090345 A 20230621; US 2023416473 A1 20231228; WO 2022111936 A1 20220602

DOCDB simple family (application)

**EP 20209440 A 20201124**; CN 202180077227 A 20211028; EP 2021079960 W 20211028; EP 21801896 A 20211028; JP 2023530623 A 20211028; KR 20237016803 A 20211028; US 202118036550 A 20211028