

Title (en)
A TWO-SIDED FLAT PRODUCT AND ITS MANUFACTURING PROCESS

Title (de)
ZWEISEITIGES FLACHPRODUKT UND SEIN HERSTELLUNGSVERFAHREN

Title (fr)
PRODUIT PLAT À DEUX CÔTÉS ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3793394 A1 20210324 (EN)

Application
EP 19730563 A 20190517

Priority
• PT 11074618 A 20180518
• PT 2019050011 W 20190517

Abstract (en)
[origin: WO2019221621A1] The present invention discloses a two-sided flat product, preferably a coin or a medal, that forms a flat plane and comprises a metal part after coining (1) and at least non-metal part after coining (2), in particular the non-metal part after coining (2) consisting of a polymer or a composite material, the metal part after coining (1) entirely surrounding the non-metal part after coining (2) along the flat plane such that, i) in the referred two sides, the non-metal part after coining (2) and the metal part after coining (1) form the surface of the flat plane, and ii) the metal part after coining (1) thereby forms a radial boundary of the flat plane. Is also discloses a process to manufacture the two-sided flat product, combination of coin minting and mechanical joining by interface contact pressure between the centre and the ring, at room temperature, in a single press stroke.

IPC 8 full level
A44C 21/00 (2006.01); **A44C 3/00** (2006.01); **B44B 5/00** (2006.01); **G07F 1/06** (2006.01)

CPC (source: EP PT)
A44C 3/004 (2013.01 - EP); **A44C 21/00** (2013.01 - EP PT); **A63F 3/00** (2013.01 - PT); **G07F 1/06** (2013.01 - EP)

Citation (search report)
See references of WO 2019221621A1

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

DOCDB simple family (publication)
WO 2019221621 A1 20191121; EP 3793394 A1 20210324; PT 110746 A 20191118

DOCDB simple family (application)
PT 2019050011 W 20190517; EP 19730563 A 20190517; PT 11074618 A 20180518