

Title (en)
MOLD TOOL AND METHOD OF MANUFACTURE THEREOF

Title (de)
FORMWERKZEUG UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
OUTIL DE MOULE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3784459 A4 20211208 (EN)

Application
EP 18925782 A 20180713

Priority
CN 2018095546 W 20180713

Abstract (en)
[origin: WO2020010600A1] A method of manufacturing a mold tool (82), the method including the steps of: a) providing a contiguous array (16) of a plurality of bodies (18) composed of a cellular material; b) selectively moving individual bodies of the array to a respective desired position to define a three-dimensional profile (28) formed by the array of bodies, the three-dimensional profile having a three-dimensionally shaped surface (30); c) applying a support layer (40) to the three-dimensionally shaped surface to form a unitary mold precursor (42) comprising the array of bodies attached together by the support layer; d) machining a surface (58) of the unitary mold precursor opposite to the support layer, the surface being composed of the array of bodies, to form a first smoothened surface (60) of the three-dimensional profile; and e) forming a molding surface (84) on the first smoothened surface. Also disclosed is a mold tool made by the method which can avoid the requirement to use a conventional plug.

IPC 8 full level
B29C 33/38 (2006.01); **B29C 33/30** (2006.01); **B29C 33/40** (2006.01); **B29C 70/54** (2006.01); **B29C 33/56** (2006.01)

CPC (source: EP)
B29C 33/308 (2013.01); **B29C 33/3842** (2013.01); **B29C 33/40** (2013.01); **B29C 33/56** (2013.01); **B29C 33/565** (2013.01)

Citation (search report)
• [A] EP 2407292 A1 20120118 - SIEMENS AG [DE]
• [A] US 2008302500 A1 20081211 - WINKLER DANIEL S [US]
• [A] US 4684113 A 19870804 - DOUGLAS WILLIAM A [US], et al
• [A] WO 02064308 A1 20020822 - PERA INTERNAT [GB], et al
• See references of WO 2020010600A1

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)
WO 2020010600 A1 20200116; EP 3784459 A1 20210303; EP 3784459 A4 20211208

DOCDB simple family (application)
CN 2018095546 W 20180713; EP 18925782 A 20180713