

Title (en)

TOOL INSERT FOR MANUFACTURING AN OBJECT, MANUFACTURING METHOD, AND OBJECT

Title (de)

WERKZEUGEINSATZ FÜR DIE HERSTELLUNG EINES GEGENSTANDS, HERSTELLUNGSVERFAHREN UND GEGENSTAND

Title (fr)

INSERT D'OUTIL POUR LA FABRICATION D'UN OBJET, PROCÉDÉ DE FABRICATION ET OBJET

Publication

**EP 4346496 A1 20240410 (DE)**

Application

**EP 22730142 A 20220518**

Priority

- EP 21177170 A 20210601
- EP 2022063402 W 20220518

Abstract (en)

[origin: WO2022253572A1] The present invention relates to a tool insert for manufacturing an object using an injection-moulding process, the proposed injection-moulding tool comprising an insert frame and at least one laminated core comprising a plurality of individual sheets, the at least one laminated core being inserted in the insert frame. Additional aspects of the invention relate to a method and a system for manufacturing an object having curved surfaces using the proposed tool insert, and to an object that can be manufactured using the proposed method. The system for manufacturing an object comprises a tool insert, as well as a sliding element. A basic idea of the invention is that curved surfaces can be formed in the object due to the insert frame having curved surfaces and/or due to at least one deformation pad being located between the insert frame and the at least one laminated core.

IPC 8 full level

**A44B 18/00** (2006.01); **B24D 9/08** (2006.01); **B29C 33/30** (2006.01); **B29C 45/00** (2006.01); **B29C 45/16** (2006.01); **B29C 45/26** (2006.01); **B29C 45/37** (2006.01); **B29C 45/44** (2006.01); **B29K 77/00** (2006.01); **B29L 31/00** (2006.01)

CPC (source: EP)

**B24B 23/022** (2013.01); **B24B 49/00** (2013.01); **B24D 3/001** (2013.01); **B24D 9/085** (2013.01); **B24D 13/16** (2013.01); **B29C 33/302** (2013.01); **B29C 45/0025** (2013.01); **B29C 45/16** (2013.01); **B29C 45/2626** (2013.01); **B29C 45/2675** (2013.01); **B29C 45/376** (2013.01); **B29C 2045/0093** (2013.01); **B29C 2045/1692** (2013.01); **B29C 2045/2677** (2013.01); **B29C 2045/2697** (2013.01); **B29C 2045/378** (2013.01); **B29K 2077/00** (2013.01); **B29L 2031/729** (2013.01)

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 4098143 A1 20221207**; EP 4346496 A1 20240410; WO 2022253572 A1 20221208

DOCDB simple family (application)

**EP 21177170 A 20210601**; EP 2022063402 W 20220518; EP 22730142 A 20220518