

Title (en)  
METHOD FOR UNDETACHABLY INTRODUCING GUIDING AID ELEMENTS INTO A COMPONENT, COMPONENT WITH GUIDING AID ELEMENTS AND COMPOSITE COMPONENT

Title (de)  
VERFAHREN ZUM UNLÖSBAREN EINBRINGEN VON FÜGEHILFSELEMENTEN IN EIN BAUTEIL, BAUTEIL MIT FÜGEHILFSELEMENTEN UND BAUTEILVERBUND

Title (fr)  
PROCÉDÉ D'INSERTION PERMANENTE D'ÉLÉMENTS DE LIAISON AUXILIAIRES DANS UN COMPOSANT, COMPOSANT COMPORTANT DES ÉLÉMENTS DE LIAISON AUXILIAIRES ET ENSEMBLE DE COMPOSANTS

Publication  
**EP 3487648 A1 20190529 (DE)**

Application  
**EP 17731121 A 20170614**

Priority  
• DE 102016213578 A 20160725  
• EP 2017064472 W 20170614

Abstract (en)  
[origin: WO2018019467A1] The invention relates to a method for undetachably introducing a guiding aid element into at least one joining location of at least one component, comprising the steps of: a) perforating the at least one component (10) at the at least one joining location in a first press stroke of a tool press, wherein a preliminary hole (12A, 12B, 12C, 12D, 12E) is formed at the at least one joining location, b) inserting a joining aid element (30) into the at least one preliminary hole (12A), and c) pressing the at least one joining aid element (30) with the at least one component (10) in a subsequent press stroke or working step to form a material-bonding, form-fitting and/or force-fitting connection between the at least one component (10) and the at least one joining aid element (30), and also relates to a component produced by the method and a composite component.

IPC 8 full level  
**B21K 25/00** (2006.01); **B21D 39/03** (2006.01); **B21J 15/00** (2006.01); **B23K 11/00** (2006.01); **B23K 11/11** (2006.01); **B23K 11/20** (2006.01); **F16B 5/04** (2006.01); **F16B 5/08** (2006.01)

CPC (source: EP US)  
**B21J 15/00** (2013.01 - EP US); **B21K 25/00** (2013.01 - EP US); **B23K 11/115** (2013.01 - EP US); **B23K 11/20** (2013.01 - EP US); **B23K 11/34** (2013.01 - EP US); **F16B 5/08** (2013.01 - EP US); **F16B 11/006** (2013.01 - EP US); **F16B 17/00** (2013.01 - EP US)

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)  
**DE 102016213578 A1 20180125**; CN 109195727 A 20190111; EP 3487648 A1 20190529; US 11111939 B2 20210907; US 2019136888 A1 20190509; WO 2018019467 A1 20180201

DOCDB simple family (application)  
**DE 102016213578 A 20160725**; CN 201780032688 A 20170614; EP 17731121 A 20170614; EP 2017064472 W 20170614; US 201916238737 A 20190103