

Title (en)  
THERMOPLASTIC FRICTIONAL CONNECTOR

Title (de)  
THERMOPLASTISCHER REIBVERBINDER

Title (fr)  
ÉLÉMENT DE LIAISON À FRICTION THERMOPLASTIQUE

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Application  
**EP 16738366 A 20160615**

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Abstract (en)  
[origin: WO2016202876A1] The invention relates to a method for producing a component bond (70, 140) comprising: a fastening structure (60, 160) that has at least one component layer (60A, 60a; 160a, 160b); and a thermoplastic connecting element (10, 110) having a head (12, 112) and a shank (14, 114), in which method the connecting element (10, 110) is driven into the fastening structure (60, 160) under pressure whilst rotating, such that the shank (14, 114) penetrates the fastening structure (60, 160). The connecting element (10, 110), after penetrating the fastening structure (60, 160), is converted by friction into a softened, free-flowing state in a die (44, 144) which is placed against the fastening structure (60, 160) in the opposite direction to the driving direction, resulting in a thicker section (22, 22) that extends beyond the radial extent of some sections of the shank (14, 114). The fastening structure (60, 160) is thus interlockingly held between the head (12, 112) and the thicker section (22, 122).

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