

Title (en)
FASTENING DEVICE

Title (de)
BEFESTIGUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE FIXATION

Publication
EP 4063296 A1 20220928 (EN)

Application
EP 22151196 A 20220112

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Abstract (en)
The present invention relates to a fastening device (10), said fastening device (10) comprising an expansion sleeve (11) having an, in particular cylindrical, elongated hollow sleeve body (13), wherein the sleeve body (13) comprises one or more, preferably four, longitudinal slots (15), which are provided spatially spaced from one another in the sleeve body (13), an elongated expansion pin (12) being provided as a drive-in pin, wherein the sleeve body (13) defines a receiving space (24), which is provided for receiving and guiding the expansion pin (12) being inserted into the sleeve body (13). In order that the fastening device (10) is universally useable for different sized applications, and wherein, at the same time the fastening device (10) can get manufactured easily and cost-effectively, it is provided according to the present invention, that the elongated expansion pin (12) comprises a longitudinal profile element (28), that the elongated expansion pin (12) comprises at least one, in particular longitudinal, rib element (32) protruding outwardly from an outer surface of the longitudinal profile element (28), and that the rib element (32) is provided for exerting a pressure force on an inner surface (35) of the sleeve body (13), when the expansion pin (12) gets inserted into the receiving space (24) of the sleeve body (13). In particular, the elongated expansion pin (12) and the sleeve body (13) are connected to one another via a material bridge (34), said material bridge (34) connecting the expansion pin (12) with the sleeve body (13).

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Citation (applicant)
• DE 1097117 B 19610112 - FISCHER ARTUR
• EP 2182223 A2 20100505 - FISCHERWERKE GMBH & CO KG [DE]
• EP 2218223 A2 20100818 - QUALCOMM INC [US]

Citation (search report)
• [XII] US 2005220561 A1 20051006 - OKADA SHIGEO [JP]
• [XPI] CN 215333845 U 20211228 - A RAYMOND ET CIE
• [XII] GB 2407616 A 20050504 - TAYLOR EGBERT H & COMPANY LTD [GB]
• [XII] EP 2182223 A2 20100505 - FISCHERWERKE GMBH & CO KG [DE]
• [A] EP 2935051 B1 20160928 - PLASTIC OMNIUM CIE [FR]
• [A] GB 1513122 A 19780607 - SCHAEFER GMBH FRITZ

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