

Title (en)
FASTENING SYSTEM FOR FASTENING SANDWICH-STRUCTURED COMPOSITE PANELS TO A SUPPORT STRUCTURE

Title (de)
BEFESTIGUNGSSYSTEM ZUR BEFESTIGUNG VON SANDWICHSTRUKTURIERTEN VERBUNDPLATTEN AN EINER TRAGSTRUKTUR

Title (fr)
SYSTÈME DE FIXATION POUR FIXER DES PANNEAUX COMPOSITES À STRUCTURE EN SANDWICH À UNE STRUCTURE DE SUPPORT

Publication
EP 3751069 B1 20211110 (EN)

Application
EP 19179936 A 20190613

Priority
EP 19179936 A 20190613

Abstract (en)
[origin: EP3751069A1] A fastening system for fastening sandwich-structured composite panels (1) to a support structure (2) comprises a sandwich-structured composite panel (1) and a fastener (6) for fastening the sandwich-structured composite panel (1) to the support structure (2). The fastening system comprises an installation hole (7) formed through the first face skin (3) and the core (5), and an elongated sleeve (8) insertable into the installation hole (7). The sleeve (8) is made of non-metallic, galvanically isolating and thermally insulating material. The sleeve (8) comprises a tubular portion (9) a hollow interior (12) defined by a side wall (13) of the tubular portion (9), a bottom wall (14) at a second end (11) and a collar flange (15) encircling an open mouth (16) at the first end (10).. The sleeve (8) has a length (L1, L2) extending in the installation hole (7) from the first face skin (3) towards the second face skin (4). The sleeve (8) forms an installation guide for the fastener (6) which is insertable into the interior (12) and fastenable through the bottom wall (14). When the sleeve (8) is in the installation hole (7), the collar flange (15) abuts against an outer surface (18) of the first face skin (3) and the fastener (6) fastened to the support structure (2) pressing the second face skin (4) against the support structure (2).

IPC 8 full level
E04B 1/76 (2006.01); **E04F 13/08** (2006.01); **E04F 13/12** (2006.01)

CPC (source: EP)
E04F 13/0846 (2013.01); **E04F 13/0866** (2013.01); **E04F 13/0875** (2013.01); **E04F 13/12** (2013.01)

Citation (examination)
US 4653246 A 19870331 - HEPLER JACQUE P [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

DOCDB simple family (publication)
EP 3751069 A1 20201216; EP 3751069 B1 20211110; LT 3751069 T 20211227; PL 3751069 T3 20220307

DOCDB simple family (application)
EP 19179936 A 20190613; LT 19179936 T 20190613; PL 19179936 T 20190613