

Title (en)

VERTICAL JOINT SYSTEM AND ASSOCIATED SURFACE COVERING SYSTEM

Title (de)

SENKRECHTES VERBINDUNGSSYSTEM UND OBERFLÄCHENABDECKUNGSSYSTEM DAFÜR

Title (fr)

SYSTÈME DE JOINT VERTICAL ET SYSTÈME DE REVÊTEMENT DE SURFACE ASSOCIÉ

Publication

**EP 4050180 A1 20220831 (EN)**

Application

**EP 22150200 A 20120316**

Priority

- AU 2011900987 A 20110318
- AU 2011902017 A 20110524
- AU 2011902871 A 20110719
- AU 2011904668 A 20111109
- EP 19195981 A 20120316
- EP 12760572 A 20120316
- AU 2012000280 W 20120316

Abstract (en)

A vertical joint system for a substrate having an opposed major first and second surfaces, the joint system comprising male and female joints (Jm, Jf) being non-symmetrical joints extending along opposite sides of the substrate, the male and female joints configured to enable two substrates with like joint systems to engage each other in response to a force applied in an engagement direction which is perpendicular to the major surfaces; the male and female joints each provided with two laterally spaced transversely extending surfaces (Cm1, Cm2; Cf1, Cf2) configured to enable the male joint of a first substrate (12a) to engage the female joint of a second substrate (12b) with the first and second transversely extending surfaces of the female joint (Cf1, Cf2) located relative to the first and second transversely extending surfaces of the male joint (Cm1, Cm2) to form respective first and second locking planes (18, 20) on an innermost and an outermost side of each joint, wherein the transversely extending surfaces are configured to enable relative rotation of two engaged substrates by up to 3° while maintaining engagement of the two substrates, and wherein at least one of the transversely extending surfaces associated with at least one of the locking planes has a profile of a continuous convex curve.

IPC 8 full level

**E04F 15/02** (2006.01); **E04F 15/04** (2006.01); **E04F 15/10** (2006.01); **E04G 23/00** (2006.01)

CPC (source: EP KR RU)

**E04C 2/38** (2013.01 - KR); **E04F 15/02** (2013.01 - KR); **E04F 15/02038** (2013.01 - EP RU); **E04F 15/0215** (2013.01 - EP);  
**E04F 15/04** (2013.01 - EP); **E04F 15/10** (2013.01 - EP); **E04G 23/006** (2013.01 - EP); **E04F 2201/0146** (2013.01 - EP);  
**E04F 2201/03** (2013.01 - EP); **E04F 2201/041** (2013.01 - EP); **E04F 2201/07** (2013.01 - EP); **E04F 2201/098** (2013.01 - EP)

Citation (search report)

- [XAY] DE 202005004537 U1 20050616 - SCHULTE JOHANNES [DE]
- [Y] DE 102005028072 A1 20061221 - AKZENTA PANEELE & PROFILE GMBH [DE]
- [YA] US 2006260252 A1 20061123 - BRICE JOHN N [CA]

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)

**WO 2012126046 A1 20120927**; BR 112013023790 A2 20161206; BR 112013023790 B1 20210629; CA 2866109 A1 20120927;  
CA 2866109 C 20170725; CL 2013002698 A1 20141114; CN 103547749 A 20140129; CN 103547749 B 20160928; EP 2686502 A1 20140122;  
EP 2686502 A4 20140917; EP 2686502 B1 20190911; EP 3597836 A1 20200122; EP 3597836 B1 20220112; EP 4050180 A1 20220831;  
JP 2014513757 A 20140605; JP 6254519 B2 20171227; KR 101998335 B1 20190709; KR 20140050596 A 20140429; MY 167150 A 20180813;  
PL 2686502 T3 20200331; PL 3597836 T3 20220502; RU 2013146212 A 20150427; RU 2604358 C2 20161210; SG 193535 A1 20131030

DOCDB simple family (application)

**AU 2012000280 W 20120316**; BR 112013023790 A 20120316; CA 2866109 A 20120316; CL 2013002698 A 20130917;  
CN 201280024041 A 20120316; EP 12760572 A 20120316; EP 19195981 A 20120316; EP 22150200 A 20120316; JP 2014500203 A 20120316;  
KR 20137027591 A 20120316; MY PI2013701686 A 20120316; PL 12760572 T 20120316; PL 19195981 T 20120316;  
RU 2013146212 A 20120316; SG 2013070404 A 20120316