



(11)

EP 2 146 024 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
25.05.2011 Bulletin 2011/21

(51) Int Cl.:
E04F 15/02 (2006.01) *E04F 15/20* (2006.01)

(43) Date of publication A2:
20.01.2010 Bulletin 2010/03

(21) Application number: 09168587.5

(22) Date of filing: 29.07.2002

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR**

Designated Extension States:
SI

(30) Priority: 27.07.2001 SE 0102620

(60) Divisional application:
**10182245.0 / 2 281 977
10182599.0 / 2 287 418**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
02749499.6 / 1 412 596

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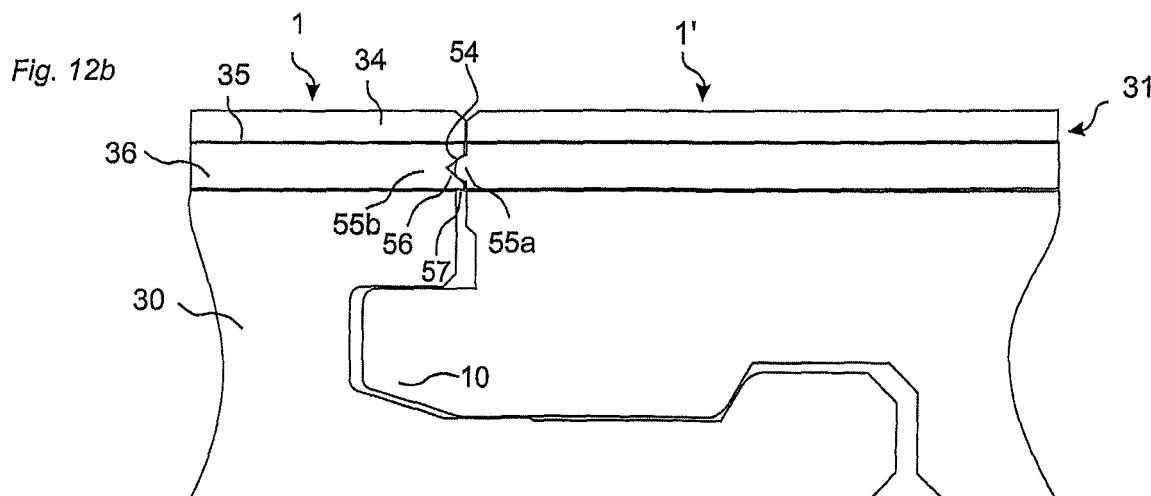
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(54) Floor panels with sealing means

(57) In a floor panel comprising a core (30), a surface layer (31) and, at opposite joint edge portions, connecting means for joining the floor panel with similar floor panels in the vertical direction, it is foreseen that at least one of said opposite joint edge portions is provided with a joint seal means (55a,55b) for counteracting penetration of

moisture, this joint seal means being made of parts of the floor panel portions located above said connecting means, being made of an elastic sealing material that is secured in the floor panel, being made by machining in connection with the forming of said connecting means and being adapted to be elastically compressed when the floor panel is joined with a similar floor panel.





EUROPEAN SEARCH REPORT

Application Number
EP 09 16 8587

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
E	EP 1 262 609 A1 (TARKETT SOMMER SA [FR] TARKETT SAS [FR]) 4 December 2002 (2002-12-04) * the whole document *	1	INV. E04F15/02 E04F15/20
X	----- WO 00/15919 A1 (ROBBINS INC [US]; NIESE MICHAEL [US]; ELLIOTT PAUL [US]) 23 March 2000 (2000-03-23)	1,6,7	
Y	* page 13 - page 18; figures *	2-5,8-10	
Y	----- DE 100 01 248 A1 (KUNNEMEYER HORNITEX [DE]) 19 July 2001 (2001-07-19)	3-5	
A	* column 3, line 8 - line 11; claims 11-16; figures 3,4 *	1	
A,D	----- WO 97/47834 A1 (UNILIN BEHEER BV [NL]) 18 December 1997 (1997-12-18) * page 15, line 12 - line 18; figure 10 *	1	
Y,D	----- WO 94/26999 A1 (VALINGE ALUMINIUM AB [SE]; PERVAN TONY [SE]) 24 November 1994 (1994-11-24)	8	TECHNICAL FIELDS SEARCHED (IPC)
A	* the whole document *	1	E04F
Y	----- US 4 242 390 A (NEMETH JOZSEF [SE]) 30 December 1980 (1980-12-30) * column 4, line 63 - column 5, line 2 * * column 5, line 60 - line 65 * * page 8, line 49 - line 58 *	2,9,10	
The present search report has been drawn up for all claims			
1	Place of search Munich	Date of completion of the search 14 April 2011	Examiner Bouyssy, Vincent
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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ON EUROPEAN PATENT APPLICATION NO.**

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ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 09 16 8587

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-04-2011

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9747834	A1		CA 2569614 A1	18-12-1997
			CA 2693267 A1	18-12-1997
			CA 2701554 A1	18-12-1997
			CL 19912007 A1	30-05-2008
			CN 1399051 A	26-02-2003
			CN 1195386 A	07-10-1998
			CN 1572993 A	02-02-2005
			CN 1891951 A	10-01-2007
			CN 1982638 A	20-06-2007
			CN 101016797 A	15-08-2007
			CN 1880702 A	20-12-2006
			CN 1880703 A	20-12-2006
			CN 101078293 A	28-11-2007
			CN 101078294 A	28-11-2007
<hr/>				
WO 9426999	A1	24-11-1994	AT 242383 T	15-06-2003
			AT 309431 T	15-11-2005
			AT 310868 T	15-12-2005
			AT 308650 T	15-11-2005
			AT 454516 T	15-01-2010
			AT 171238 T	15-10-1998
			AT 187222 T	15-12-1999
			AT 189287 T	15-02-2000
			AT 280291 T	15-11-2004
			AT 256233 T	15-12-2003
			AU 671919 B2	12-09-1996
			AU 6763094 A	12-12-1994
			BG 61457 B1	29-08-1997
			BG 100126 A	28-06-1996
			BR 9406718 A	06-02-1996
			CA 2150384 A1	24-11-1994
			CA 2339339 A1	24-11-1994
			CA 2339341 A1	24-11-1994
			CA 2339342 A1	24-11-1994
			CA 2339344 A1	24-11-1994
			CN 1285447 A	28-02-2001
			CN 1285448 A	28-02-2001
			CN 1294238 A	09-05-2001
			CN 1294239 A	09-05-2001
			CN 1514087 A	21-07-2004
			CN 1122623 A	15-05-1996
			CZ 9502852 A3	15-05-1996
			DE 05025406 T1	17-12-2009
			DE 69413391 D1	22-10-1998
			DE 69413391 T2	04-02-1999

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 09 16 8587

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-04-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		DE 69421945 D1	05-01-2000
WO 9426999 A1		DE 69421945 T2	27-04-2000
		DE 69422838 D1	02-03-2000
		DE 69422838 T2	15-06-2000
		DE 69432807 D1	10-07-2003
		DE 69432807 T2	19-05-2004
		DE 69433415 D1	22-01-2004
		DE 69433415 T2	16-09-2004
		DE 69434094 D1	25-11-2004
		DE 69434094 T2	24-03-2005
		DE 69434534 D1	08-12-2005
		DE 69434534 T2	18-05-2006
		DE 69434539 D1	15-12-2005
		DE 69434539 T2	24-05-2006
		DE 69434559 D1	29-12-2005
		DE 69434559 T2	01-06-2006
		DK 1260653 T3	05-12-2005
		DK 1260654 T3	30-01-2006
		DK 1626136 T3	06-04-2010
US 4242390 A	30-12-1980	FR 2385858 A1	27-10-1978
		GB 1588383 A	23-04-1981
		SE 414067 B	07-07-1980
		SE 7703660 A	01-10-1978