

Title (en)  
Mechanical connection of panels

Title (de)  
Mechanische Verbindung von Paneelen

Title (fr)  
Liaison mécanique de panneaux

Publication  
**EP 1223266 A3 20030702 (DE)**

Application  
**EP 02009077 A 20000803**

Priority  
• DE 10010351 A 20000307  
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• EP 00962292 A 20000803

Abstract (en)  
[origin: US6497079B1] A panel connection, particularly for flooring panels, having a groove (35) that is formed at a side edge (5); a tongue (32) that is formed at a side edge (6); a depression (39) that is formed in the groove (35) and has an interlocking surface (16); an interlocking groove (34) that is formed at the tongue (32) and has an interlocking surface (26); and fitting surfaces (14, 24), which are formed the groove (35) and at the tongue (32) and serve as abutments for the interlocking surfaces (16, 26). The properties of interlocking and orientation stability are improved in that a recess (40), which is formed by a facing surface (11) that extends perpendicular to the top side (3) and a fitting surface (12) that extends parallel to the top side (3), is provided in the region of the side edge (5). An upper lip (30), which is formed by a facing surface (21) that extends perpendicular to the top side (4) and a fitting surface (22) that extends parallel to the top side (4), is provided in the region of the side edge (6). The fitting surfaces (12, 22) resting against one another and the facing surfaces (11,21) resting against one another in the interlocked state of the connection.

IPC 1-7  
**E04F 15/04**

IPC 8 full level  
**E04F 15/02** (2006.01); **E04F 13/08** (2006.01); **E04F 15/04** (2006.01)

CPC (source: EP KR US)  
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**E04F 2201/025** (2013.01 - EP US)

Citation (search report)  
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• [A] DE 4130115 A1 19930318 - HEINEMANN HERBERT [DE]  
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• [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10 30 November 1995 (1995-11-30)

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**US 6497079 B1 20021224**; AT E222983 T1 20020915; AU 7408000 A 20010917; BG 107053 A 20030430; BG 64183 B1 20040331; CA 2344258 A1 20010907; CA 2344258 C 20060131; CN 1451071 A 20031022; CZ 20022988 A3 20030618; CZ 294391 B6 20041215; DE 20018284 U1 20010125; DE 50000424 D1 20021002; DK 1169528 T3 20021104; EE 200200501 A 20040216; EP 1169528 A1 20020109; EP 1169528 B1 20020828; EP 1223266 A2 20020717; EP 1223266 A3 20030702; ES 2181661 T3 20030301; HR P20020724 A2 20031231; HR P20020724 B1 20040630; HU 223627 B1 20041028; HU P0300022 A2 20030528; JP 2003526752 A 20030909; KR 20030001374 A 20030106; MD 20020206 A 20030131; MD 2266 B1 20030930; MD 2266 C2 20040331; MX PA02008741 A 20050429; NO 20024106 D0 20020828; NO 20024106 L 20021031; NO 317710 B1 20041206; NZ 520758 A 20040625; PL 197416 B1 20080331; PL 364810 A1 20041213; PT 1169528 E 20030131; RU 2002126565 A 20040227; RU 2241811 C2 20041210; WO 0166876 A1 20010913; YU 66702 A 20040903

DOCDB simple family (application)  
**US 71257300 A 20001114**; AT 00962292 T 20000803; AU 7408000 A 20000803; BG 10705302 A 20020902; CA 2344258 A 20000803; CN 00819294 A 20000803; CZ 20022988 A 20000803; DE 20018284 U 20000803; DE 50000424 T 20000803; DK 00962292 T 20000803; EE P200200501 A 20000803; EP 0007541 W 20000803; EP 00962292 A 20000803; EP 02009077 A 20000803; ES 00962292 T 20000803; HR P20020724 A 20020905; HU P0300022 A 20000803; JP 2001565473 A 20000803; KR 20027011759 A 20020907; MD 20020206 A 20000803; MX PA02008741 A 20000803; NO 20024106 A 20020828; NZ 52075800 A 20000803; PL 36481000 A 20000803; PT 00962292 T 20000803; RU 2002126565 A 20000803; YU P66702 A 20000803