

Title (en)  
HAND-RAIL

Title (de)  
HANDLAUF

Title (fr)  
MAIN COURANTE

Publication  
**EP 1112219 B1 20030507 (DE)**

Application  
**EP 99944536 A 19990827**

Priority  
• AT 153698 A 19980911  
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Abstract (en)  
[origin: WO0015536A1] The invention relates to a hand-rail that can be used for escalators, moving pavements and the like. The inventive hand-rail has a C-shaped cross-section, outer layers in the form of a sliding layer (3) and a rubber top layer (2) for the user, a layer with tractive support elements, especially steel chords that are embedded in rubber and oriented in a longitudinal direction, and at least one respective reinforcing layer (5) extending into the lip areas on both sides of the tractive support elements. At least one of the reinforcing layers (5) consists of a rubber layer with homogeneously distributed short fibres (6) with a preferred orientation, extending at an angle deviating from 0 DEG in relation to the longitudinal direction of the hand-rail (1).

IPC 1-7  
**B66B 23/24**

IPC 8 full level  
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Cited by  
US7083037B2; WO2004106039A1

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**WO 0015536 A1 20000323**; AT 407377 B 20010226; AT A153698 A 20000715; BR 9913628 A 20010522; CA 2343037 A1 20000323; CN 1113802 C 20030709; CN 1316972 A 20011010; DE 59905487 D1 20030612; EP 1112219 A1 20010704; EP 1112219 B1 20030507; ES 2193743 T3 20031101; JP 2002524372 A 20020806; KR 20010073150 A 20010731; US 6673431 B1 20040106

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