

Title (en)  
Sleeper with bottom coating

Title (de)  
Bahnschwelle mit unterseitiger Beschichtung

Title (fr)  
Traverse avec revêtement sur le dessous

Publication  
**EP 1298252 A3 20040121 (DE)**

Application  
**EP 02022017 A 20021001**

Priority  
• DE 10149308 A 20011001  
• DE 10156411 A 20011116

Abstract (en)  
[origin: EP1298252A2] A railway track has rails resting on a concrete bed (12) ('railway sleepers'). The concrete bed is separated from an underlying elastic plastic layer (14) by esp. a 3-10 mm-thick layer (16) of random fibres pref. 'Geofibre' textile. The Geotextile layer is bonded both to the concrete and elastic plastic layer (14).

IPC 1-7  
**E01B 3/46**; **E01B 19/00**

IPC 8 full level  
**E01B 3/46** (2006.01)

CPC (source: EP)  
**E01B 3/46** (2013.01)

Citation (search report)  
• [DA] DE 4315215 A1 19931111 - PHOENIX AG [DE]  
• [X] PATENT ABSTRACTS OF JAPAN vol. 001, no. 158 (M - 052) 15 December 1977 (1977-12-15)

Cited by  
WO2012139143A1; WO2019201761A1; WO2011110669A1; EP1445378A3; CN102906335A; BE1020135A3; JP2007051457A; RU2762015C1; WO2012139142A1; US7896255B2; DE102015205484A1; WO2017125541A1; WO2013068259A1; WO2014110608A1; WO2012122610A2; WO2012040798A1; WO2012122610A3

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**EP 1298252 A2 20030402**; **EP 1298252 A3 20040121**; **EP 1298252 B1 20060607**; **EP 1298252 B2 20110601**; AT E329087 T1 20060615; DE 20215101 U1 20030227; DE 50207081 D1 20060720; DK 1298252 T3 20061009; DK 1298252 T4 20110905; ES 2266378 T3 20070301; ES 2266378 T5 20110926; PT 1298252 E 20061031

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**EP 02022017 A 20021001**; AT 02022017 T 20021001; DE 20215101 U 20021001; DE 50207081 T 20021001; DK 02022017 T 20021001; ES 02022017 T 20021001; PT 02022017 T 20021001