

Title (en)

Pad underneath a sleeper for protection to ballast

Title (de)

Unterlage unter einer Schwelle als Schutz zum Bettungsmaterial

Title (fr)

Semelle sous traverse pour protection du ballast

Publication

EP 0833008 B1 20020828 (FR)

Application

EP 97402274 A 19970930

Priority

FR 9611872 A 19960930

Abstract (en)

[origin: EP0833008A1] A concrete railway sleeper sole plate (1) has tubular projections (11) on its upper surface to engage with the concrete during casting and release any air container in it, and an elastomer covering layer on its underside. The projections are made with divergent upper edges for an improved grip with the concrete, while the elastomer covering layer is taken over the edges of the plate and fastened to its upper surface. It also forms a lining to the tubular projections.

IPC 1-7

E01B 3/00; **E01B 3/28**; **E01B 3/46**; **E01B 9/68**; **E01B 19/00**

IPC 8 full level

E01B 3/28 (2006.01); **E01B 3/32** (2006.01)

CPC (source: EP KR)

E01B 3/28 (2013.01 - EP); **E01B 3/42** (2013.01 - KR); **E01B 3/46** (2013.01 - EP); **E01B 2204/01** (2013.01 - EP); **E01B 2204/10** (2013.01 - KR)

Cited by

RU2756929C1; GB2582778A; ES2166732A1; EP1186709A3; FR2983876A1; FR2983875A1; RU209004U1; WO2008122066A1; WO2008122065A1; WO2013088072A1; WO2013088073A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 0833008 A1 19980401; **EP 0833008 B1 20020828**; DE 69714932 D1 20021002; DE 69714932 T2 20030327; ES 2185887 T3 20030501; FR 2753998 A1 19980403; FR 2753998 B1 19981218; JP H10183503 A 19980714; KR 19980025137 A 19980706; TW 494163 B 20020711

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