

Title (en)

Method for crack repair on concrete sleepers for railway tracks

Title (de)

Verfahren zur Rissanierung an Betonschwellen von Gleisanlagen

Title (fr)

Procédé de rénovation de fissures sur des seuils en béton d'installations de voie ferrée

Publication

EP 2690218 B1 20161123 (DE)

Application

EP 13177512 A 20130722

Priority

DE 102012106632 A 20120722

Abstract (en)

[origin: EP2690218A2] The method involves carrying out crack analysis in concrete sleepers (6). A crack (1) in the concrete sleepers is dammed such that confinement is applied along the crack in a strip form. A clearance surface is formed in an upper area of the concrete sleepers by removing the confinement along the crack. A filling substance is injected into the clearance surface on the crack by using an injection device and a low pressure pump until the crack is completely filled by the filling substance, so that the low-pressure pump is controlled by using a pressure drop sensor. The filling material is one-component, two-component or multi-component epoxy resin or polyurethane.

IPC 8 full level

E01B 31/20 (2006.01)

CPC (source: EP)

E01B 31/20 (2013.01)

Citation (opposition)

Opponent : Deutsche Bahn AG,

• EP 2405080 A1 20120111 - SERSA GROUP AG SCHWEIZ [CH]

• "Bundesanstalt für Straßenwesen", ZUSÄTZLICHE TECHNISCHE VERTRAGSBEDINGUNGEN UND RICHTLINIEN FÜR INGENIEURBAUTEN (ZTV-ING) - TEIL 3, MASSIVBAU, ABSCHNITT 5, FÜLLEN VON RISSEN UND HOHLRÄUMEN IN BETONBAUTEILEN, April 2010 (2010-04-01), XP055415660, Retrieved from the Internet <URL:https://www.farbe-bfi.de/1003_ZTV-ING-Teil-3-Abschn-5-Fuellen-Risse-Hohlraeume.pdf>

• "Füllen von Rissen", ZEMENT-MERKBLATT BETONTECHNIK, no. B26, June 2003 (2003-06-01), XP055415664, Retrieved from the Internet <URL:https://www.vdz-online.de/fileadmin/gruppen/vdz/3LiteraturRecherche/Zementmerkblaetter/B26.pdf>

• "Rißsanierung - Schließen, Abdichten, dehnfähiges und kraftschlüssiges Verbinden", WEBAC BROSCHE, November 2001 (2001-11-01), pages 1 - 13, XP055415681

• "Rißverpressung - Prinzipielle Anmerkungen zum Verpressen von Rissen in Betonbauteilen", June 2001 (2001-06-01), XP055415682, Retrieved from the Internet <URL:http://www.smp-ing.de/webyp-system/programm/download.php?FILENAME=14-2-at-download.pdf&ORG_FILENAME=Rissverpressung2001.pdf>

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CN114952515A; EP4105384A1; DE102021115681A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 13177512 A 20130722; DE 102013107822 A 20130722; DE 202013012347 U 20130722; EP 16200099 A 20130722; PL 13177512 T 20130722