

Title (en)

Method for laying and compacting an asphalt layer

Title (de)

Verfahren zum Einbauen und Verdichten einer Asphaltsschicht

Title (fr)

Procédé pour la pose et le compactage d'une couche d'asphalte

Publication

EP 2514871 B1 20160511 (DE)

Application

EP 11003244 A 20110418

Priority

EP 11003244 A 20110418

Abstract (en)

[origin: EP2514871A1] The system (S) has a road paver (F) that is provided with a screed (E) including compacting tools and self-propelled compacting device (V). An electronic material density module (M) is associated with the road paver which collects data during the paving operation on actual degree of compaction of the asphalt layer produced in the area of compacting tool. A data-obtaining unit of the material density module is located on the road paver. An independent claim is included for method of laying down asphalt layer made of asphalt material.

IPC 8 full level

E01C 19/00 (2006.01); **E01C 19/23** (2006.01); **E01C 19/48** (2006.01)

CPC (source: EP US)

E01C 19/00 (2013.01 - EP US); **E01C 19/23** (2013.01 - EP US); **E01C 19/48** (2013.01 - EP US)

Citation (opposition)

Opponent : BOMAG GmbH

- JP 2530000 B2 19960904
- US 6749364 B1 20040615 - BAKER ADRIAN [US], et al
- DE 20010498 U1 200000928 - VOEGELE AG J [DE]
- DE 102008058481 A1 20090730 - CATERPILLAR INC [US]
- DE 69416006 T2 19990819 - CATERPILLAR INC [US]
- WO 9425680 A1 19941110 - THURNER GEODYNAMIK AB [SE], et al
- WO 2007073451 A1 20070628 - CATERPILLAR INC [US], et al
- DE 102006019841 B3 20071220 - MOBA MOBILE AUTOMATION AG [DE]
- HANS-JOSEF KLOUBERT, WOLFGANG WALLRATH: "Intelligent Asphalt Compaction", BOMAG REPORT, July 2010 (2010-07-01), pages 1 - 12, XP055355258
- D. VEERAMANI ET AL.: "Computer-integrated collaborative design and operation in the construction industry", AUTOMATION IN CONSTRUCTION,, vol. 7, 1998, pages 485 - 492, XP004149395
- HUI-PING TSERNG ET AL.: "An Operations Planning System for Asphalt Pavement Compaction", PROCEEDINGS OF THE 13TH ISARC,, 1996, pages 349 - 358, XP055355275
- AGATA LIGIER ET AL.: "OPEN SYSTEM FOR ROAD INFORMATION SUPPORT", January 2001 (2001-01-01), pages 1 - 6, XP055355289, Retrieved from the Internet <URL:www.researchgate.net>
- JOCHEN WENDEBAUM: "Nutzung der Kerntemperaturvorhersage zur Verdichtung von Asphaltmischgut im Strassenbau", DISSERTATION UNIVERSITÄT FRIDERICIANA ZU KARLSRUHE (TH),, 27 July 2004 (2004-07-27), pages 1pp, i-x, 1 - 98, XP007921250

Opponent : Caterpillar Inc.

- EP 2514871 A1 20121024 - VOEGELE AG J [DE]
- US 6749364 B1 20040615 - BAKER ADRIAN [US], et al
- DE 20010498 U1 200000928 - VOEGELE AG J [DE]
- DEUTSCHER ASPHALTVERBAND: "Verdichtungsgrad", 3 February 2017 (2017-02-03), pages 1 - 2, XP055355220, Retrieved from the Internet <URL:http://www.asphalt.de/site/startseite/technik/technischer_briefkasten_faq/verdichtungsgrad/>
- ANONYMOUS: "Raumdichte- Wikipedia", 5 October 2008 (2008-10-05), pages 1, XP055355225, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Raumdichte>
- ANONYMOUS: "Wärmeausdehnung- Wikipedia", 20 December 2016 (2016-12-20), pages 1 - 4, XP055355228, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Wärmeausdehnung>
- GEORGE CHANG ET AL.,: "A Study on Intelligent Compaction and In-Place Asphalt Density", PUBLICATION NO. FHWA-HIF-14-017, December 2014 (2014-12-01), pages 1pp, i-x, 145 - 161, XP055355235

Cited by

US2022275590A1; CN103046459A; CN108867272A; CN112853875A; EP3214222A1; US10316477B2; EP2514871B1

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)

EP 2514871 A1 20121024; EP 2514871 B1 20160511; CN 102747673 A 20121024; CN 102747673 B 20150520; CN 202830716 U 20130327; JP 2012225153 A 20121115; JP 5453482 B2 20140326; PL 2514871 T3 20161230; US 2012263531 A1 20121018; US 9068295 B2 20150630

DOCDB simple family (application)

EP 11003244 A 20110418; CN 201210115686 A 20120418; CN 201220166714 U 20120418; JP 2012091797 A 20120413; PL 11003244 T 20110418; US 201213445305 A 20120412