

Title (en)

Invention that reduce or eliminate force mixing in production of asphalt pavings and cement concrete

Title (de)

Erfindung zur Verringerung oder Beseitigung der Kraftmischung bei der Herstellung von Asphaltdecken und Zementbeton

Title (fr)

Invention qui réduit ou élimine la force de mélange dans la production de revêtement d'asphalte et de béton au ciment

Publication

EP 2476529 A3 20140416 (EN)

Application

EP 11007798 A 20110926

Priority

SE 1000959 A 20100928

Abstract (en)

[origin: EP2476529A2] Interfacial Engineering: "Technology to model, synthesize, characterize, and understand, and manipulate interfaces including those between surface and bio molecules. The production of materials free from agglomerations/aggregation, perfectly dispersed and stable in synthesis and application". (Reg Davis. University of Florida. (1999). The interaction between dust particles and the liquids of mixes in the production of asphalt and cement concrete, develops only when the dust particles are dispersed in the liquid. When force mixing a set mass of dust particles by the paddles of the mixer, an unknown portion of the particles are agglomerated and thus not interacting with the liquid. The reason for the invention was the requirement of the dispersion of the dust material before the particles are in contact with the liquids. The knowledge, methods and proposed means contributes to the invention. Force mixing of dust material is destructive to all durable properties of the products of asphalt pavings and cement concrete. The result of the invention is shown by the regularity in the results from tests on mix by the "TOD, Test of dispersion method" The requirement of the technique of the invention for improved dispersion of dust material in the production of said products was shown by irregularities in the results of TOD test on mixes produced by the known methods of mixing.

IPC 8 full level

B28C 5/00 (2006.01); **B01F 29/60** (2022.01); **B28C 7/04** (2006.01); **E01C 19/10** (2006.01)

CPC (source: EP)

B01F 27/702 (2022.01); **B01F 27/82** (2022.01); **B01F 27/95** (2022.01); **B01F 29/60** (2022.01); **B01F 35/715** (2022.01); **B01F 35/7173** (2022.01);
B01F 35/7175 (2022.01); **B28C 5/003** (2013.01); **B28C 7/0404** (2013.01); **B28C 7/0477** (2013.01); **E01C 19/1027** (2013.01);
E01C 19/104 (2013.01); **E01C 19/1072** (2013.01)

Citation (search report)

- [XI] AU 464167 B2 19750821
- [XDI] WO 9528262 A1 19951026 - OHLSON KARL GUNNAR [SE]
- [XI] EP 0756615 A1 19970205 - OHLSON KARL GUNNAR [SE]
- [XI] EP 1408157 A2 20040414 - OHLSON KARL GUNNAR [SE]
- [XAI] GB 354981 A 19310820 - ALBRECHT REISER, et al
- [XA] FR 856517 A 19400617 - J J NEVEUX SA
- [A] JP S56109713 A 19810831 - NIPPON ROTSKURA APIE KK, et al
- [A] FR 2417334 A1 19790914 - BRAMS SOREN [DK]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2476529 A2 20120718; EP 2476529 A3 20140416

DOCDB simple family (application)

EP 11007798 A 20110926