

Title (en)
Equipment for microwave heating of reconditioned asphalt roads

Title (de)
Gerät zur Mikrowellenerwärmung von reparierten Asphaltstraßen

Title (fr)
Équipement pour le chauffage par micro-ondes de routes asphalte de reconditionnement

Publication
EP 2434054 A1 20120328 (EN)

Application
EP 11466015 A 20110624

Priority
CZ 201022895 U 20100628

Abstract (en)
A microwave heating equipment for asphalt road repairs, containing two microwave heating units (11), which are located in a mobile frame (7). The heat source of each heating unit (11) is a magnetron (1), which generates microwave radiation at the frequency of 2.45 GHz. Next to the magnetron (1), there is a waveguide (2) designed to guide and aim the microwave radiation from the magnetron (1) to the repaired spot on the road (10). Further, the heating unit (11) contains a fan (3) to cool the magnetron (1) and to divert the heat from its surroundings towards the waveguide (2). The mobile frame (7) is equipped with casters (9) and a chain screen (8) to prevent the escape of microwave radiation. The source of energy can be the electricity supplied by the ordinary means (230/400 V) or by a mobile power unit.

IPC 8 full level
E01C 23/14 (2006.01)

CPC (source: EP)
E01C 23/065 (2013.01); **E01C 23/14** (2013.01); **H05B 6/642** (2013.01); **H05B 6/701** (2013.01); **H05B 6/76** (2013.01); **H05B 6/80** (2013.01)

Citation (applicant)
CZ 407499 A 19991117

Citation (search report)
• [Y] CN 2701906 Y 20050525 - GUANGDONG MIDEA GROUP CO LTD [CN]
• [Y] US 4319856 A 19820316 - JEPSSON MORRIS R
• [A] DE 10121929 A1 20020103 - DUNGER RUEDIGER [DE]
• [A] GB 2024291 A 19800109 - JEPSSON M

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CN105970789A; CN111979890A; CN116537002A; CN107268402A; CN106769635A; WO2019193493A1

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 2434054 A1 20120328; CZ 21269 U1 20100913

DOCDB simple family (application)
EP 11466015 A 20110624; CZ 201022895 U 20100628