

Title (en)

Melter to homogenize and heat a product, in particular a composition of marking out of the ground

Title (de)

Schmelzkessel zum Wärmen und Homogenisieren eines Produktes, insbesondere eine Zusammensetzung für Bodenmarkierung

Title (fr)

Fondoir pour homogénéiser et chauffer un produit, notamment une composition de marquage au sol

Publication

EP 1779924 A1 20070502 (FR)

Application

EP 06301092 A 20061026

Priority

FR 0511061 A 20051028

Abstract (en)

A melting chamber to homogenize and heat a ground marking composition in liquid/pasty form comprises a vertical tank (1) to receive the composition, a heating- and an agitating device (8), where the tank has a cylindrical side wall fixed at bottom of the tank. The agitating device comprises a central shaft (9) extended coaxially with the side wall of the tank, an engine (14) fixed at the upper end of the shaft to activate the rotation of the central shaft, and two perforated discs (10) circulated parallelly to the bottom of the tank by the central shaft. The melting chamber to homogenize and heat a ground marking composition in liquid/pasty form, comprises a vertical tank (1) to receive the composition, a heating- and an agitating device (8), where the tank has a cylindrical side wall fixed at bottom of the tank. The agitating device comprises a central shaft (9) extended coaxially with the side wall of the tank, an engine (14) fixed at the upper end of the shaft to activate the rotation of the central shaft, and two perforated discs (10) circulated parallelly to the bottom of the tank by the central shaft. The lower disc is adjacent to the bottom of the tank and separated from the bottom of the tank by a distance smaller than the separation from the upper disc. The discs comprise angularly and radially equal holes. The bottom of the tank is connected to the side wall of the tank by a truncated part, which is widened upwards. The lower disc is located at the level of the truncated part and has a diameter lower than diameter of the upper disc. The central shaft contains two radial blades inclined in opposite directions and placed above the upper disc. The heating device comprises a combustion chamber placed at the bottom of the tank and around the lower part of the side wall of the tank, a burner connected to the combustion chamber, an energy source to supply energy to the burner, and a fume evacuation device. The fume evacuation device comprises an annular space connected to the combustion chamber in which the space is externally surrounded to the side wall of the tank, and an exit located at the upper end of the tank. The annular space contains baffle vertical walls. The annular space is externally delimited by a cylindrical wall, which is covered by an insulating material placed in a protection cover.

IPC 8 full level

B01F 27/93 (2022.01)

CPC (source: EP)

B01F 27/90 (2022.01); **B01F 27/93** (2022.01); **B01F 35/92** (2022.01); **B01F 27/0723** (2022.01); **B01F 27/0724** (2022.01); **B01F 27/0725** (2022.01); **B01F 27/1151** (2022.01); **B01F 27/192** (2022.01); **B01F 2035/99** (2022.01); **B01F 2101/30** (2022.01)

Citation (search report)

- [A] EP 1110598 A1 20010627 - SUZUKI AKIRA [JP], et al
- [A] US 3814396 A 19740604 - DI GREGORIO D, et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 14 22 December 1999 (1999-12-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 08 5 August 2002 (2002-08-05)

Cited by

CN110918000A; CN108407077A; CN103551073A; CN108176300A; CN105561846A; CN108993292A; CN103638843A; CN109317043A; CN105797631A; CN111068567A; WO2012035357A1; US9498820B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1779924 A1 20070502; **EP 1779924 B1 20080604**; AT E397484 T1 20080615; DE 602006001387 D1 20080717; DK 1779924 T3 20080908; ES 2307275 T3 20081116; FR 2892642 A1 20070504; FR 2892642 B1 20071130; PL 1779924 T3 20081031; PT 1779924 E 20080903

DOCDB simple family (application)

EP 06301092 A 20061026; AT 06301092 T 20061026; DE 602006001387 T 20061026; DK 06301092 T 20061026; ES 06301092 T 20061026; FR 0511061 A 20051028; PL 06301092 T 20061026; PT 06301092 T 20061026