

Title (en)  
BULK-MATERIAL COOLER FOR COOLING HOT MATERIAL TO BE COOLED

Title (de)  
SCHÜTTGUTKÜHLER ZUM KÜHLEN VON HEISSEM KÜHLGUT

Title (fr)  
SYSTEME DE REFROIDISSEMENT DE PRODUITS EN VRAC, POUR REFROIDIR UN PRODUIT CHAUD DEVANT ETRE REFROIDI

Publication  
**EP 1743131 A1 20070117 (DE)**

Application  
**EP 05739685 A 20050503**

Priority  
• EP 2005004761 W 20050503  
• DE 102004022754 A 20040507

Abstract (en)  
[origin: WO2005114080A1] The aim of the invention is to design a bulk-material cooler, particularly one for cooling cement clinker, which operates according to the walking floor principle, so that its cooling grate can be composed of a multitude of ventilated cooling grate modules, which can be assembled in an easy and variable manner, in order to obtain large lengths and widths of the cooler. When these cooling grate modules move between an advancing and returning position, even lateral and/or height offset of the guiding elements can be compensated for in a kinematic manner. To this end, the invention provides that the cooling grate, when viewed over the length and width of the cooler, is composed of a multitude of modules (13, 14) ventilated with cooling air (18). The coupling of the cooling grate modules (13, 14) of each longitudinal row of cooling grate modules is effected by an articulated joint (21, 22).

IPC 8 full level  
**F27D 15/02** (2006.01); **B65G 25/06** (2006.01); **C04B 7/47** (2006.01); **F27B 7/38** (2006.01); **F27D 19/00** (2006.01)

CPC (source: EP US)  
**F27B 7/38** (2013.01 - EP US); **F27D 15/0213** (2013.01 - EP US); **F27D 15/022** (2013.01 - EP US); **F27D 19/00** (2013.01 - EP US); **F27D 2015/0226** (2013.01 - EP US); **F27D 2015/0233** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005114080A1

Cited by  
DE202012005978U1

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005114080 A1 20051201**; AT E441825 T1 20090915; BR PI0510605 A 20071030; CN 1981174 A 20070613; CN 1981174 B 20100623; DE 102004022754 A1 20051201; DE 502005008050 D1 20091015; DK 1743131 T3 20100104; EP 1743131 A1 20070117; EP 1743131 B1 20090902; ES 2333135 T3 20100217; JP 2007536494 A 20071213; JP 5009150 B2 20120822; MX PA06012681 A 20070214; NO 20065623 L 20061206; PL 1743131 T3 20100226; RU 2006143210 A 20080620; RU 2397419 C2 20100820; US 2007259298 A1 20071108; US 7708556 B2 20100504

DOCDB simple family (application)  
**EP 2005004761 W 20050503**; AT 05739685 T 20050503; BR PI0510605 A 20050503; CN 200580014665 A 20050503; DE 102004022754 A 20040507; DE 502005008050 T 20050503; DK 05739685 T 20050503; EP 05739685 A 20050503; ES 05739685 T 20050503; JP 2007511995 A 20050503; MX PA06012681 A 20050503; NO 20065623 A 20061206; PL 05739685 T 20050503; RU 2006143210 A 20050503; US 57980905 A 20050503