

Title (en)

COOLER AND A METHOD FOR COOLING HOT BULK MATERIAL

Title (de)

KÜHLER UND VERFAHREN ZUM KÜHLEN VON HEISSEM SCHÜTTGUT

Title (fr)

DISPOSITIF DE REFROIDISSEMENT ET PROCEDE DE REFROIDISSEMENT DE MATIERES EN VRAC CHAUDES

Publication

**EP 1272803 B2 20081008 (DE)**

Application

**EP 01929549 A 20010411**

Priority

- DE 10018142 A 20000412
- EP 0104198 W 20010411

Abstract (en)

[origin: WO0177600A1] The invention relates to a cooler (1) and a method for cooling hot bulk material (2). The hot bulk material is charged onto a stationary aeration bottom (3) that can be flown through by cooling gas and is transported by means of conveying elements that are arranged above the aeration bottom and can be moved to-and-fro. At least two groups of conveying elements (4, 5, 6) are used which are actuated in a combined manner in the transport direction (9) and separately from one another against the transport direction.

IPC 8 full level

**F27B 7/38** (2006.01); **F27D 15/02** (2006.01)

CPC (source: EP US)

**F27D 15/0213** (2013.01 - EP US)

Citation (opposition)

Opponent :

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- US 5799778 A 19980901 - QUAECK MANFRED W [US]
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- EP 0616184 A1 19940921 - PETERS AG CLAUDIUS [DE]
- US 2629504 A 19530224 - PETERSON WALTER R
- DE 4417422 A1 19951123 - KRUPP POLYSIUS AG [DE]
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DE102010055825C5; DE102006023678A1; DE102006023678B4; DE102005032518A1; DE102005032518B4; WO2012084608A1; DE102010055825A1; WO2018110420A1

Designated contracting state (EPC)

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Designated extension state (EPC)

RO

DOCDB simple family (publication)

**WO 0177600 A1 20011018**; AU 5628501 A 20011023; BR 0109554 A 20030603; BR 0109554 B1 20100223; CA 2403331 A1 20011018; CA 2403331 C 20090922; CN 1294397 C 20070110; CN 1423741 A 20030611; CZ 20023396 A3 20030813; CZ 298001 B6 20070523; DE 10018142 A1 20011018; DE 10018142 B4 20111020; DE 50108173 D1 20051229; DK 1272803 T3 20060130; DK 1272803 T4 20090105; EP 1272803 A1 20030108; EP 1272803 B1 20051123; EP 1272803 B2 20081008; ES 2250396 T3 20060416; ES 2250396 T5 20090216; JP 2003530537 A 20031014; JP 4913974 B2 20120411; MX PA02010037 A 20030212; US 2003126878 A1 20030710; US 6796141 B2 20040928

DOCDB simple family (application)

**EP 0104198 W 20010411**; AU 5628501 A 20010411; BR 0109554 A 20010411; CA 2403331 A 20010411; CN 01808135 A 20010411; CZ 20023396 A 20010411; DE 10018142 A 20000412; DE 50108173 T 20010411; DK 01929549 T 20010411; EP 01929549 A 20010411; ES 01929549 T 20010411; JP 2001574818 A 20010411; MX PA02010037 A 20010411; US 25743102 A 20021204