

Title (en)

Device for cooling or heating bulk material and method for operating such a device

Title (de)

Vorrichtung zum Kühlen oder Heizen von Schüttgut sowie Verfahren zum Betreiben einer derartigen Vorrichtung

Title (fr)

Dispositif de refroidissement ou de chauffage de produits en vrac ainsi que procédé de fonctionnement d'un tel dispositif

Publication

EP 2006628 B1 20130306 (DE)

Application

EP 08008794 A 20080510

Priority

DE 102007027967 A 20070619

Abstract (en)

[origin: EP2006628A2] The device comprises a heat exchanger section (2) with a housing (5), heat exchanger tubes (7), which are arranged in the housing in the direction of gravity. An inlet (8) is opened in the housing for a heat carrier fluid, and an outlet (9) is opened out from the housing for the heat carrier fluid. A bulk good-insertion section is arranged at the upper end of heat exchanger tube for supplying the bulk (20) in the tubes. An outlet section (3) is arranged at the lower end of the heat exchanger tubes for removing the bulk good from the pipes. The device also has an inlet (28), which is opened in the bulk-outlet section for a heat exchanger gas, and an outlet (34), which is opened out from the bulk-good entry section (1) for the heat carrier gas. Gas supply devices (29,38), which lead the heat-carrier gas into the counter current flow from the bulk good-current of the inlet over the pipes to the outlet. The gas supply device is carried out for provision of a gas volume such that the heat carrier gas in the pipes has an empty pipe gas velocity, which lies in the range between 20% and 200% of a critical empty pipe gas velocity. An independent claim is also included for a method for operating a device, which involves determining a critical empty tubing gas speed.

IPC 8 full level

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CPC (source: EP)

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