

Title (en)  
Process and apparatus for cooling a particulate material.

Title (de)  
Verfahren und Vorrichtung zur Kühlung einer pulverförmigen Substanz.

Title (fr)  
Procédé et dispositif de refroidissement d'une substance pulvérulente.

Publication  
**EP 0436140 B1 19940309 (DE)**

Application  
**EP 90123424 A 19901206**

Priority  
DE 3941262 A 19891214

Abstract (en)  
[origin: EP0436140A1] The invention relates to a process and an apparatus for cooling a pulverulent material by means of a cooling liquid during filling of a container with this material. The powder drops from the filling socket (1) onto a baffle plate (2a, 2b) and forms a finely distributed deflected flow, over which the cooling liquid is sprayed from a distribution grid (4a, 4b) provided on its underside with outlet openings. The baffle plate can consist either of a straight plate (2a) or an obtuse cone (2b). The configuration of the distributor grid for the cooling liquid is modified in accordance with the shape of the baffle plate. Liquid nitrogen is suitable as cooling liquid for many purposes. <IMAGE>

IPC 1-7  
**F28C 3/14**; **B28C 7/00**

IPC 8 full level  
**B28C 7/00** (2006.01); **F28C 3/14** (2006.01)

CPC (source: EP)  
**F28C 3/14** (2013.01)

Cited by  
CN102774669A; CN105775795A; AT522559A1; AT522559B1; WO2008040674A1; EP4173790A1; DE102021005338A1; EP4173789A1; EP4173791A1; DE102021005339A1; DE102021005340A1; US12044447B2; EP2077933B1

Designated contracting state (EPC)  
AT DE ES FR IT NL

DOCDB simple family (publication)  
**EP 0436140 A1 19910710**; **EP 0436140 B1 19940309**; AT E102701 T1 19940315; DE 3941262 C1 19910801; DE 59004918 D1 19940414

DOCDB simple family (application)  
**EP 90123424 A 19901206**; AT 90123424 T 19901206; DE 3941262 A 19891214; DE 59004918 T 19901206