

Title (en)  
DEVICE FOR DISTRIBUTING A LUMPY BULK MATERIAL

Title (de)  
VORRICHTUNG ZUM VERTEILEN EINES STÜCKIGEN SCHÜTTGUTES

Title (fr)  
DISPOSITIF POUR REPARTIR UN PRODUIT EN MORCEAUX EN VRAC

Publication  
**EP 1325156 A2 20030709 (DE)**

Application  
**EP 01969651 A 20010827**

Priority

- AT 16122000 A 20000922
- EP 0109852 W 20010827

Abstract (en)  
[origin: US7513729B2] The invention relates to an apparatus and a process for distributing a lumpy bulk material, in particular iron ore which has been at least partially prereduced, onto an extensive surface, in particular onto a fixed bed, this surface extending within a reactor or vessel used in physical or chemical process technology, in particular in a reactor used in a metallurgical plant to produce pig iron or primary steel products, and the lumpy bulk material being charged via at least one charging apparatus, which has at least two, in particular rotationally symmetrical, chutes, which are preferably arranged at the same distance from the vertical longitudinal axis of the reactor. In this arrangement, at least a proportion of the bulk material, in particular after it has been introduced into the chute, before it comes into contact with the extensive surface, is distributed in the radial and/or tangential direction-as seen from above-at a scattering device which is assigned to at least one of the chutes and is preferably in the chute.

IPC 1-7  
**C21B 7/00**

IPC 8 full level  
**C21B 11/02** (2006.01); **C21B 5/00** (2006.01); **C21B 13/00** (2006.01); **F27B 1/20** (2006.01); **F27D 3/10** (2006.01); **F27D 3/00** (2006.01)

CPC (source: EP KR US)  
**C21B 5/008** (2013.01 - EP US); **C21B 13/002** (2013.01 - EP US); **F27B 1/20** (2013.01 - EP KR US); **F27D 2003/0007** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0227041 A2 20020404; WO 0227041 A3 20021024**; AT 409140 B 20020527; AT A16122000 A 20011015; AT E353979 T1 20070315; AU 2001289838 B2 20060608; AU 2001289838 B9 20070301; AU 8983801 A 20020408; BR 0113935 A 20030722; BR 0113935 B1 20091201; CA 2420533 A1 20030304; CA 2420533 C 20090922; CN 100347506 C 20071107; CN 1462355 A 20031217; CZ 2003817 A3 20031015; DE 50112046 D1 20070329; EP 1325156 A2 20030709; EP 1325156 B1 20070214; JP 2004510121 A 20040402; KR 100815377 B1 20080319; KR 20030045080 A 20030609; MX PA03002143 A 20040504; MY 142749 A 20101231; PL 196447 B1 20080131; PL 360593 A1 20040920; RU 2272076 C2 20060320; SK 2742003 A3 20030911; SK 287155 B6 20100107; TW 550290 B 20030901; UA 74209 C2 20051115; US 2004022621 A1 20040205; US 2006182555 A1 20060817; US 7059818 B2 20060613; US 7513729 B2 20090407; ZA 200301707 B 20040301

DOCDB simple family (application)  
**EP 0109852 W 20010827**; AT 01969651 T 20010827; AT 16122000 A 20000922; AU 2001289838 A 20010827; AU 8983801 A 20010827; BR 0113935 A 20010827; CA 2420533 A 20010827; CN 01816120 A 20010827; CZ 2003817 A 20010827; DE 50112046 T 20010827; EP 01969651 A 20010827; JP 2002530803 A 20010827; KR 20037004054 A 20030320; MX PA03002143 A 20010827; MY PI20014183 A 20010905; PL 36059301 A 20010827; RU 2003111473 A 20010827; SK 2742003 A 20010827; TW 90121149 A 20010828; UA 200343573 A 20010827; US 38094103 A 20030623; US 39397006 A 20060330; ZA 200301707 A 20030228