

## Title (en)

METERING SYSTEM, DENSE PHASE CONVEYING SYSTEM AND METHOD FOR SUPPLYING BULK MATERIAL IN POWDER FORM

## Title (de)

DOSIERANLAGE, DICHTSTROMFÖRDERANLAGE UND VERFAHREN ZUM ZUFÜHREN VON STAUBFÖRMIGEM SCHÜTTGUT

## Title (fr)

INSTALLATION DE DOSAGE, INSTALLATION DE TRANSPORT À ÉCOULEMENT DENSE ET PROCÉDÉ D'ALIMENTATION EN MATÉRIAU PULVÉRULENT EN VRAC

## Publication

**EP 2486326 A2 20120815 (DE)**

## Application

**EP 10770996 A 20101008**

## Priority

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## Abstract (en)

[origin: CA2776633A1] The invention relates to a metering system for the steady, continuous, metered supply of a bulk material in powder form of light-weight, polydisperse particles from a supply device (B, SG) to a plurality of conveying tubes (FR1,FR2,FR3) to a downstream consumer. The metering system comprises at least two metering containers (DB1,DB2,DB3) with respective discharge devices (AE2/1,AE2/2,AE2/3), the discharge device (AE2/1,AE2/2,AE2/3) comprising for every conveying tube (FR1,FR2,FR3) a powder flow control device (FI1/1,FI2/1,FI3/2) associated therewith and leading to said tube. A mass flow measuring probe (FIC1,FIC2,FIC3) is arranged on every conveying tube (FR1,FR2,FR3) and is coupled to the powder flow control device (FI1/1 to FI3/2) which leads to the corresponding conveying tube (FR1,FR2,FR3). The metering system further comprises a pressure control device which is coupled to pressure measuring devices (PI1/1,PI1/2,PI1/3) arranged on the discharge devices (AE2/1,AE2/2,AE2/3) and which controls a metering container pressure (PIS2/1,PIS2/2,PIS2/3) at least depending on a metering container fill level (LIS1,LIS2,LIS3). A pump device (V) can be coupled to every metering container (DB1,DB2,DB3) and provides a pressure (PIS2/1,PIS2/2,PIS2/3) in the metering container (DB1,DB2,DB3) which is lower than the pressure in the supply device (B, SG). The invention further relates to a dense phase conveying system which comprises the metering system and to a method for the steady, continuous, metered supply of a bulk material in powder form of light-weight, polydisperse particles.

## IPC 8 full level

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