

Title (en)

AIR CANNON FOR REMOVAL OF FLOWABLE MATERIAL FROM A MATERIAL HANDLING SYSTEM

Title (de)

LUFTKANONE ZUM ENTFERNEN VON RIESELFÄHIGEM MATERIAL AUS EINEM MATERIALBEHANDLUNGSSYSTEM

Title (fr)

CANON A AIR POUR ENLEVER UN MATERIAU FLUIDE D'UN DISPOSITIF DE MANUTENTION DE MATERIEL

Publication

EP 1993937 A2 20081126 (EN)

Application

EP 07758328 A 20070312

Priority

- US 2007063769 W 20070312
- US 78105806 P 20060310

Abstract (en)

[origin: US2007209648A1] An air cannon or aerator has a first source of a pressurized gas, such as a tank, a discharge tube assembly, a valve assembly configured to regulate the flow of pressurized gas from the tank to the discharge tube assembly, and a receiving member or basket having a first end configured to receive and seat the valve assembly and a second end configured to releasably and securely mate with the discharge tube assembly. The discharge tube assembly, valve assembly, and basket are all concentrically aligned along a central, longitudinal axis extending substantially coaxial with the longitudinal center line of the tank. The positioning of the discharge tube assembly and valve assembly close to a longitudinal center line of the tank, thereby providing for a central location for the energy discharge, and the provision of large ports in the basket facilitating substantially unobstructed fluid communication between the tank and discharge tube assembly, together facilitate smooth discharge of the pressurized gas as well as increased efficiency and force output of the air cannon.

IPC 8 full level

B65D 88/70 (2006.01)

CPC (source: EP US)

B65D 88/703 (2013.01 - EP US); **F41B 11/62** (2013.01 - EP US); **F41B 11/723** (2013.01 - EP US); **F41B 11/87** (2013.01 - EP US)

Citation (search report)

See references of WO 2007106763A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2007209648 A1 20070913; AU 2007226621 A1 20070920; BR PI0708768 A2 20110614; CN 101432208 A 20090513; EP 1993937 A2 20081126; MX 2008011372 A 20081128; WO 2007106763 A2 20070920; WO 2007106763 A3 20071213

DOCDB simple family (application)

US 68427807 A 20070309; AU 2007226621 A 20070312; BR PI0708768 A 20070312; CN 200780013975 A 20070312; EP 07758328 A 20070312; MX 2008011372 A 20070312; US 2007063769 W 20070312