



US009409663B2

(12) **United States Patent**
Dabek et al.

(10) **Patent No.:** **US 9,409,663 B2**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **PRODUCT DISPENSING SYSTEM TO MAINTAIN PRODUCT HOMOGENEITY OR PRODUCE A HOMOGENOUS FLUID-PARTICULATE MIXTURE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 86 days.

(21) Appl. No.: **14/339,001**

(22) Filed: **Jul. 23, 2014**

(65) **Prior Publication Data**

US 2015/0028060 A1 Jan. 29, 2015

Related U.S. Application Data

(60) Provisional application No. 61/857,540, filed on Jul. 23, 2013.

(51) **Int. Cl.**
G01F 11/00 (2006.01)
B65B 37/06 (2006.01)

(52) **U.S. Cl.**
CPC **B65B 37/06** (2013.01); **B65B 2210/10** (2013.01)

(58) **Field of Classification Search**
CPC **B65B 37/06**; **B65B 2210/10**
USPC **222/233-235**
See application file for complete search history.

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(57) **ABSTRACT**

A product dispensing system includes a hopper, a housing defining an outlet lumen in communication with the hopper, an exit port, a valve, and a piston. The valve is transitionable between a closed position, wherein the exit port is closed off from the outlet lumen, and an open position, establishing communication between the outlet lumen and the exit port. The piston is movable from a first use position, wherein the piston partially occupies the outlet lumen, to a storage position, wherein the piston fully occupies the outlet lumen to urge any product mixture in the outlet lumen back into the hopper. The piston may further be movable between the first use position and a second use position to draw the product mixture from the hopper into the outlet lumen and to urge the product mixture out of the exit port.

9 Claims, 1 Drawing Sheet

