The United States of America



The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2)or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Juen Stared Rew

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(12) United States Patent Oren

(10) Patent No.:

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(45) Date of Patent:

Jan. 7, 2014

(54) SYSTEM OF DELIVERING AND STORING PROPPANT FOR USE AT A WELL SITE AND CONTAINER FOR SUCH PROPPANT

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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 26 days.

(21) Appl. No.: 13/427,140

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(65) Prior Publication Data

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Related U.S. Application Data

(63) Continuation-in-part of application No. 13/332,937, filed on Dec. 21, 2011.

(51) Int. Cl. B65G 65/00

(2006.01)

(52) U.S. Cl.

USPC 222/185.1; 222/462; 222/561

See application file for complete search history.

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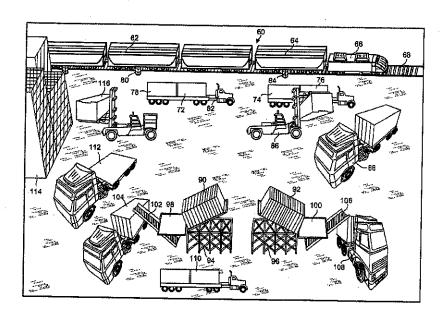
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(57) ABSTRACT

A method of delivering proppant to a well site has the steps of transporting a load of proppant in a vessel to a desired location, moving the load of proppant from the vessel into a container so as to create a proppant-loaded container, unloading the proppant-loaded container into a pneumatic bulk trailer, and transporting the unloaded proppant in the pneumatic bulk trailer to well site. The container is placed onto a bed of a truck and moved in proximity to the vessel. The proppant-loaded container is placed onto a tilting mechanism and then tilted so that the proppant is discharged through a flow gate of a container into a hopper. The proppant in the hopper can then be conveyed to the pneumatic bulk trailer.

8 Claims, 2 Drawing Sheets



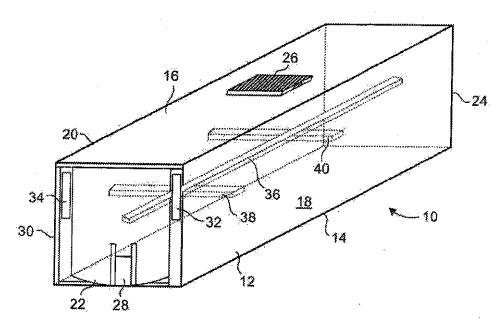


FIG. 1

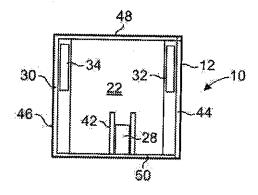


FIG. 2

