

Title (en)  
IMPROVED LOADER

Title (de)  
VERBESSERTER LADER

Title (fr)  
CHARGEUR PERFECTIONNÉ

Publication  
**EP 2841345 A4 20151125 (EN)**

Application  
**EP 13769507 A 20130328**

Priority

- US 201261617824 P 20120330
- US 201261624720 P 20120416
- US 201313792392 A 20130311
- US 2013034346 W 20130328

Abstract (en)  
[origin: US2013255199A1] A horn system for an automated loader has horns with upstanding and bottom walls. The horns move from a first, adjacent position in which the bottom wall of the horns completely or almost completely overlap to a second, remote position in which the bottom walls of the horns just barely overlap or do not overlap.

IPC 8 full level  
**B65B 43/26** (2006.01); **B65B 5/04** (2006.01); **B65B 25/06** (2006.01); **B65B 39/02** (2006.01); **B65B 39/04** (2006.01); **B65B 43/36** (2006.01); **B65B 65/00** (2006.01)

CPC (source: EP RU US)  
**B65B 5/045** (2013.01 - EP US); **B65B 25/064** (2013.01 - EP US); **B65B 39/02** (2013.01 - EP US); **B65B 39/04** (2013.01 - EP US); **B65B 43/36** (2013.01 - EP US); **B65B 65/00** (2013.01 - EP US); **B65B 43/262** (2013.01 - RU)

Citation (search report)

- [XYI] EP 2237946 A1 20101013 - ROCKWOOL INT [DK]
- [XYI] EP 2256043 A1 20101201 - SEELEN AS [DK]
- [YA] US 4432188 A 19840221 - ANDREWS HAROLD D [US]
- [Y] US 2005284108 A1 20051229 - GRIGGS SAMUEL D [US], et al
- [Y] US 5226269 A 19930713 - STOLTENBERG RONALD F [US]
- [A] CN 102083692 A 20110601 - GUNZE KK
- [A] JP H04189720 A 19920708 - JAPAN SYNTHETIC RUBBER CO LTD
- See references of WO 2013149000A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2013255199 A1 20131003**; EP 2841345 A1 20150304; EP 2841345 A4 20151125; EP 2841345 B1 20170913; RU 2014143260 A 20160527; RU 2634934 C2 20171108; WO 2013149000 A1 20131003

DOCDB simple family (application)  
**US 201313792392 A 20130311**; EP 13769507 A 20130328; RU 2014143260 A 20130328; US 2013034346 W 20130328