

Title (en)  
Commodity carrying out device

Title (de)  
Vorrichtung zur Warenausgabe

Title (fr)  
Dispositif d'exécution de marchandises

Publication  
**EP 1993078 A3 20090211 (EN)**

Application  
**EP 08156050 A 20080512**

Priority  
JP 2007130300 A 20070516

Abstract (en)  
[origin: EP1993078A2] The present invention provides a commodity carrying out device that can reliably carry out a vertically-long shaped commodity in an upright state from a commodity storage column to a bucket. More specifically, since a commodity positioned at the front end side of a commodity storage column is tilted forward to be moved into a bucket, when moving a vertically-long shaped commodity in an upright state into a bucket, it is possible to move the commodity without the commodity toppling backwards. Thus, the commodity can be reliably moved into the bucket.

IPC 8 full level  
**G07F 7/00** (2006.01)

CPC (source: EP US)  
**G07F 11/04** (2013.01 - EP US); **G07F 11/165** (2013.01 - EP US)

Citation (search report)

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

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 1993078 A2 20081119; EP 1993078 A3 20090211; EP 1993078 B1 20110727**; CN 101308591 A 20081119; CN 101308591 B 20111116; EP 2383708 A2 20111102; EP 2383708 A3 20120229; EP 2383708 B1 20140730; EP 2390849 A2 20111130; EP 2390849 A3 20120229; EP 2390849 B1 20140730; JP 2008310810 A 20081225; JP 5222446 B2 20130626; US 2008283545 A1 20081120

DOCDB simple family (application)  
**EP 08156050 A 20080512**; CN 200810099076 A 20080516; EP 11175385 A 20080512; EP 11178787 A 20080512; JP 2008128545 A 20080515; US 12168008 A 20080515