

Title (en)  
PILE TRANSFER DEVICE AND METHOD

Title (de)  
STAPELÜBERGABEVORRICHTUNG UND -VERFAHREN

Title (fr)  
DISPOSITIF ET PROCEDE DE TRANSFERT DE PILES

Publication  
**EP 1861327 B1 20091202 (DE)**

Application  
**EP 06727522 A 20060321**

Priority  
• IB 2006000960 W 20060321  
• US 66324705 P 20050321

Abstract (en)  
[origin: WO2006100589A1] The invention relates to a system for initiating the minimal vertical transition of a buffer storage unit between a first plane (102) and a second plane (104), where said first and second planes are essentially coplanar and the first plane (102) is situated below the second plane (104). The first plane (102) is provided with elements along a curve of approximately 90° on said plane (102) for deflecting a multitude of bearing elements. The second plane is provided with elements for a second deflection of the multitude of bearing elements, said elements being positioned along a second curve of approximately 90° on a second plane (104), said second plane (104) being essentially perpendicular in relation to the first plane (102). The system is also provided with elements for a third deflection of the multitude of bearing elements on the second plane (104), said elements being positioned at a distance from one another that is essentially the same as the distance between the first and the second planes (102, 104). The second plane (104) is provided with elements for a fourth deflection of the multitude of bearing elements from the second plane (104) to the first plane (102), said deflection elements executing a third curve of approximately 90° in relation to the second plane (104) and a fourth curve of approximately 90° in relation to said plane (104).

IPC 8 full level  
**B65H 31/30** (2006.01)

CPC (source: EP US)  
**B07C 3/00** (2013.01 - EP US); **B65H 31/30** (2013.01 - EP US); **B65H 2301/42264** (2013.01 - EP US); **B65H 2404/232** (2013.01 - EP US); **B65H 2404/264** (2013.01 - EP US); **Y10S 209/90** (2013.01 - EP)

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2006100589 A1 20060928**; AT E440678 T1 20090915; AT E442916 T1 20091015; AT E444124 T1 20091015; AT E450466 T1 20091215; AT E535316 T1 20111215; AT E542609 T1 20120215; DE 502006004665 D1 20091008; DE 502006004861 D1 20091029; DE 502006004976 D1 20091112; DE 502006005512 D1 20100114; DK 1861327 T3 20100329; DK 1863598 T3 20120521; DK 1863599 T3 20120319; DK 1863600 T3 20100111; DK 1868740 T3 20091221; DK 1868742 T3 20091130; EP 1861327 A1 20071205; EP 1861327 B1 20091202; EP 1863598 A1 20071212; EP 1863598 B1 20120125; EP 1863599 A1 20071212; EP 1863599 B1 20111130; EP 1863600 A1 20071212; EP 1863600 B1 20090916; EP 1868740 A1 20071226; EP 1868740 B1 20090930; EP 1868742 A1 20071226; EP 1868742 B1 20090826; US 2009050541 A1 20090226; US 2009060698 A1 20090305; US 7888616 B2 20110215; US 8127917 B2 20120306; WO 2006100592 A1 20060928; WO 2006100594 A1 20060928; WO 2006100598 A1 20060928; WO 2006100599 A1 20060928; WO 2006100600 A2 20060928; WO 2006100600 A3 20070104; WO 2006100601 A1 20060928; WO 2006100604 A1 20060928

DOCDB simple family (application)  
**IB 2006000680 W 20060321**; AT 06710599 T 20060321; AT 06710600 T 20060321; AT 06727497 T 20060321; AT 06727498 T 20060321; AT 06727500 T 20060321; AT 06727522 T 20060321; DE 502006004665 T 20060321; DE 502006004861 T 20060321; DE 502006004976 T 20060321; DE 502006005512 T 20060321; DK 06710599 T 20060321; DK 06710600 T 20060321; DK 06727497 T 20060321; DK 06727498 T 20060321; DK 06727500 T 20060321; DK 06727522 T 20060321; EP 06710599 A 20060321; EP 06710600 A 20060321; EP 06727497 A 20060321; EP 06727498 A 20060321; EP 06727500 A 20060321; EP 06727522 A 20060321; IB 2006000690 W 20060321; IB 2006000703 W 20060321; IB 2006000907 W 20060321; IB 2006000912 W 20060321; IB 2006000913 W 20060321; IB 2006000920 W 20060321; IB 2006000960 W 20060321; US 88661406 A 20060321; US 88661506 A 20060321