

Title (en)
SECTIONAL GATE

Title (de)
SEKTIONALTOR

Title (fr)
PORTE EN PLUSIEURS PARTIES

Publication
EP 0897448 A1 19990224 (DE)

Application
EP 97921846 A 19970502

Priority
• DE 29607802 U 19960502
• EP 9702242 W 19970502

Abstract (en)
[origin: US6105312A] PCT No. PCT/EP97/02242 Sec. 371 Date Mar. 26, 1999 Sec. 102(e) Date Mar. 26, 1999 PCT Filed May 2, 1997 PCT Pub. No. WO97/42387 PCT Pub. Date Nov. 13, 1997A sectional gate assembly to move a sectional gate between an open position and a closed position by an upper and lower closing element. The upper closing element is flexibly connected with the lower closing element, and both the upper and lower closing elements each have a first and a second opposite side and one or more guides which are arranged on each of the first and second opposite sides of the closing elements. The sectional gate assembly includes a first and a second single track guide rail. The first and second guide rails each have a vertical section and a horizontal section connected with a curved portion. One or more of the guides on the upper and lower closing elements are adapted to move within the guide rail. A weight-counterbalancer is included in the sectional gate assembly. The weight-counterbalancer has a traction mechanism which engages at a first end on one of the upper and/or lower said closing elements, and at a second end on an energy accumulator which allows the lower closing element to move into the horizontal section of the rail guides. The weight-counterbalancer also includes a deflection roller for the traction mechanism which is arranged beneath the horizontal section of the rail guides so that the weight-counterbalancer exerts, by way of the traction mechanism, a pulling force that acts generally horizontally on the lower closing element in the gate open position. The pulling force acts generally vertically on the lower closing element in the gate closed position. The sectional gate assembly further includes a mechanism to swivel an upper edge of the upper closing element out of alignment with the guide rails in the closed position. The mechanism includes a pivoting lever attached to the upper closing element and has an arrangement to drive the upper closing element from a first position in the gate open position into a second position in the gate closed position and back to the first position.

IPC 1-7
E05D 13/00; **E05D 15/24**

IPC 8 full level
E05D 13/00 (2006.01); **E05D 15/24** (2006.01); **E05F 1/16** (2006.01); **E06B 3/48** (2006.01); **E06B 9/04** (2006.01); **E06B 9/58** (2006.01); **E06B 9/62** (2006.01)

CPC (source: EP US)
E05D 13/1215 (2013.01 - EP US); **E05D 15/24** (2013.01 - EP US); **E06B 9/04** (2013.01 - EP US); **E05D 15/248** (2013.01 - EP US); **E05Y 2201/488** (2013.01 - EP US); **E05Y 2201/67** (2013.01 - EP US); **E05Y 2800/21** (2013.01 - EP US); **E05Y 2900/106** (2013.01 - EP US)

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DE102016004707A1; EP1076144A3; DE10300302A1; DE102017123493A1; WO2019072654A1; WO2017178091A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
US 6105312 A 20000822; AT E195791 T1 20000915; CZ 296828 B6 20060614; CZ 345998 A3 19990512; DE 29607802 U1 19960829; DE 29724333 U1 20010222; DE 59702241 D1 20000928; DK 0897448 T3 20001227; EP 0897448 A1 19990224; EP 0897448 B1 20000823; ES 2152668 T3 20010201; GR 3034892 T3 20010228; HU 221686 B1 20021228; HU P9901470 A2 19990830; HU P9901470 A3 19991129; PL 184344 B1 20021031; PL 329641 A1 19990412; PT 897448 E 20010228; SK 148698 A3 19990611; SK 285558 B6 20070301; WO 9742387 A1 19971113

DOCDB simple family (application)
US 18023598 A 19981102; AT 97921846 T 19970502; CZ 345998 A 19970502; DE 29607802 U 19960502; DE 29724333 U 19970502; DE 59702241 T 19970502; DK 97921846 T 19970502; EP 9702242 W 19970502; EP 97921846 A 19970502; ES 97921846 T 19970502; GR 20000402581 T 20001122; HU P9901470 A 19970502; PL 32964197 A 19970502; PT 97921846 T 19970502; SK 148698 A 19970502