

Title (en)
TROLLEY MOVING MECHANISM IN CIRCULATING TYPE GANTRY CRANE

Title (de)
BEWEGUNGSMECHANISMUS FÜR DIE LAUFKATZE EINES PORTALKRANES

Title (fr)
DISPOSITIF DE DEPLACEMENT DE CHARIOT D'UN PONT ROULANT A PORTIQUE

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Application
EP 00927907 A 20000519

Priority
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• KR 19990018086 A 19990519

Abstract (en)
[origin: WO0069768A1] A trolley moving mechanism of a circulating type gantry crane including spreaders, hooks which are coupled to the spreaders, movable hoists for lifting the hooks, and trolleys which move along a boom in combination with the spreaders, the trolley moving mechanism characterized in that first and second steel cables for moving the trolleys are installed within the boom in the direction of the length of the boom, and circulate while receiving power from an external source. Also, in the trolley moving mechanism, on each of the trolleys are installed a steel cable holder for coupling a trolley to a steel cable by combination with one of the first and second steel cables, and an unlocker for unlocking a steel cable from the steel cable holder. Furthermore, under the hoist are installed a guide member for pausing the motion of a trolley by separating a steel cable from a steel cable holder by the operation of the unlocker on a trolley which arrives under the hoist, and a moving means for transferring trolleys and spreaders from the first steel cable to the second cable or in the reverse direction while reciprocating between the first and second steel cables. Accordingly, a plurality of trolleys and spreaders move cargo while circulating along a boom, so that the speed of loading and unloading is high. A hoist is pre-positioned and waits at a predetermined location, or is moved to a required location in advance and waits, so that accurate position control required to move cargo in existing cranes is no longer needed. Furthermore, shaking of spreaders is fundamentally prevented, and a reduction in the time taken for accurate position control can remarkably increase the speed of loading/unloading containers.

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Citation (search report)
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