Title (en)

CRANE AND CRANE CONTROL METHOD

Title (de)

KRAN UND KRANSTEUERUNGSVERFAHREN

Title (fr)

GRUE ET PROCÉDÉ DE COMMANDE DE GRUE

Publication

EP 4059875 A1 20220921 (EN)

Application

EP 20888560 A 20200702

Priority

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- JP 2020026086 W 20200702

Abstract (en)

A crane is provided in which a stopping distance is reduced to improve safety while a payload sway occurring when the crane is stopped is suppressed. The crane includes: a velocity command generation section that generates a movement velocity command for a horizontal movement device; and a crane control section that moves the horizontal movement device according to the velocity command. And, the velocity command generation section generates: a deceleration pattern v1 in which deceleration is performed from the moment a stop operation start signal is received; and an acceleration and deceleration pattern v2 in which acceleration and deceleration are performed to cancel out a payload sway x01 resulting from superposition of a payload sway x0 at the time of the stop operation start and a payload sway x1 occurring when the horizontal movement device is driven according to the deceleration pattern v1. The horizontal movement device is driven according to the deceleration pattern v1 from the time of the stop operation start, and then the horizontal movement device is driven according to the acceleration and deceleration pattern v2 such that a time at which the amount of payload sway of the payload sway x01 reaches a maximum and a center time of the acceleration and deceleration pattern v2 coincide with each other.

IPC 8 full level

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CPC (source: EP)

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