

Title (en)

CRANE 3D WORKSPACE SPATIAL TECHNIQUES FOR CRANE OPERATION IN PROXIMITY OF OBSTACLES

Title (de)

RÄUMLICHE 3D-KRANARBEITSPLATZTECHNIKEN FÜR KRANBETRIEB IN DER NÄHE VON HINDERNISSEN

Title (fr)

TECHNIQUES SPATIALES DE TRAVAIL DE GRUE 3D POUR OPÉRATION DE GRUE À PROXIMITÉ D'OBSTACLES

Publication

EP 3530607 B1 20230510 (EN)

Application

EP 19158674 A 20190221

Priority

US 201815902111 A 20180222

Abstract (en)

[origin: EP3530607A1] A method for controlling a crane component of a tower crane (90) in proximity of obstacles (400) at a worksite by defining a forbidden volume is disclosed. In the method a distance from the crane component to an outer surface of the forbidden volume is determined and a computing device (300) limits movement of the crane component based on the distance from the crane component to the outer surface of the forbidden volume to avoid entering the forbidden volume with the crane component while the crane is in operation. The crane component is one or more of a boom (110) and a hook block (150).

IPC 8 full level

B66C 13/18 (2006.01); **B66C 13/46** (2006.01); **B66C 15/04** (2006.01)

CPC (source: EP)

B66C 13/18 (2013.01); **B66C 13/46** (2013.01); **B66C 15/04** (2013.01)

Citation (examination)

EP 3037376 B1 20180718 - MANITOWOC CRANE COMPANIES LLC [US]

Cited by

CN111003646A

Designated contracting state (EPC)

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