

Title (en)  
CRANE

Title (de)  
KRAN

Title (fr)  
GRUE

Publication  
**EP 2847121 B1 20151021 (DE)**

Application  
**EP 14710818 A 20140317**

Priority  

- DE 102013005936 A 20130405
- EP 2014000721 W 20140317

Abstract (en)  
[origin: WO2014161636A1] The invention relates to a crane, in particular a rotary tower crane, having drive devices (9-15) for crane and/or load movements in/around multiple movement axes, and having a crane control system (16) for driving the drive devices, wherein the crane control system has a monitoring device (17) for monitoring the crane loading and restricting crane movements when load limits are reached. The monitoring device has at least two load limits (LM1, LM2, LM3), between which the drive devices can only be actuated individually.

IPC 8 full level  
**B66C 23/90** (2006.01)

CPC (source: EP)  
**B66C 23/90** (2013.01)

Citation (opposition)

Opponent : MANITOWOC CRANE GROUP FRANCE  

- RU 2319657 C2 20080320 - INDENBAUM ANATOLIJ IOSIFOVICH [RU], et al
- EP 0849213 A1 19980624 - LIEBHERR WERK BIBERACH GMBH [DE]
- DE 10115312 A1 20021002 - MAN WOLFFKRAN [DE]
- CA 2001046 A1 19900419 - FISCHER CHRISTOPH [DE]
- DE 3103728 A1 19820902 - KRUPP GMBH [DE], et al
- WO 0232805 A1 20020425 - LIEBHERR WERK NENZING [AT], et al
- FR 2796060 A1 20010112 - LIEBHERR WERK EHINGEN [DE]
- EP 1925585 A1 20080528 - LIEBHERR WERK EHINGEN [DE]
- US 6170681 B1 20010109 - YOSHIMATSU HIDEAKI [JP]
- US 7172082 B2 20070206 - IRSCH MICHAEL [DE], et al
- US 7395940 B2 20080708 - ABEL PETER [DE], et al

Opponent : Manitowoc Crane Group France  

- RU 2319657 C2 20080320 - INDENBAUM ANATOLIJ IOSIFOVICH [RU], et al
- EP 0849213 A1 19980624 - LIEBHERR WERK BIBERACH GMBH [DE]
- DE 10115312 A1 20021002 - MAN WOLFFKRAN [DE]
- CA 2001046 A1 19900419 - FISCHER CHRISTOPH [DE]
- DE 3103728 A1 19820902 - KRUPP GMBH [DE], et al
- WO 0232805 A1 20020425 - LIEBHERR WERK NENZING [AT], et al
- FR 2796060 A1 20010112 - LIEBHERR WERK EHINGEN [DE]
- EP 1925585 A1 20080528 - LIEBHERR WERK EHINGEN [DE]
- US 6170681 B1 20010109 - YOSHIMATSU HIDEAKI [JP]
- US 7172082 B2 20070206 - IRSCH MICHAEL [DE], et al
- US 7395940 B2 20080708 - ABEL PETER [DE], et al
- DE 19931303 A1 20010201 - LIEBHERR WERK EHINGEN [DE]
- DE 2839419 A1 19800327 - KRUPP GMBH
- DE 4417608 A1 19950810 - LIEBHERR WERK BIBERACH GMBH [DE]
- DE 19637124 A1 19980319 - ILNSEHER JOHANN [DE]

Cited by  
DE102021102699A1; WO2022167589A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102013005936 A1 20141009**; DE 212014000007 U1 20150204; EP 2847121 A1 20150318; EP 2847121 B1 20151021;  
ES 2559664 T3 20160215; WO 2014161636 A1 20141009

DOCDB simple family (application)  
**DE 102013005936 A 20130405**; DE 212014000007 U 20140317; EP 14710818 A 20140317; EP 2014000721 W 20140317;  
ES 14710818 T 20140317