

Title (en)
Crane jib

Title (de)
Kranausleger

Title (fr)
Flèche de grue

Publication
EP 1657211 B1 20081203 (DE)

Application
EP 05016876 A 20050803

Priority
DE 202004017771 U 20041116

Abstract (en)
[origin: US2006096940A1] The present invention relates to a crane boom, in particular a telescopic boom of a mobile crane, comprising a boom guying which has at least one guy rope which is guided from an inner articulation point in the region of a boom articulation point to an outer articulation point in the region of a projecting boom part. In accordance with the invention, the guy rope is articulated at its outer end such that the guy rope force induces a bending moment in the crane boom which counters the sagging of the crane boom. This can be achieved in that the guy rope is articulated eccentrically from the boom part. In accordance with the invention, the outer articulation point of the guy rope is arranged spaced apart from the boom part at an articulation jib which is secured to the boom part such that a tensile force of the guy rope induces a bending moment into the crane boom via the articulation jib, said bending moment reducing the bending moment generated in the boom by a hook load and the boom's own weight. The articulation jib which projects transversely to the longitudinal boom axis forms a bending moment jib, so to say, which is secured to the outer end of the crane boom or to one of the outer boom parts such that a bending moment reducing the sagging of the crane boom is generated in the crane boom by the guying force via the articulation jib.

IPC 8 full level
B66C 23/82 (2006.01)

CPC (source: EP US)
B66C 23/66 (2013.01 - EP US); **B66C 23/826** (2013.01 - EP US)

Cited by
US10392233B2; CN105084233A

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 202004017771 U1 20060323; DE 502005006129 D1 20090115; EP 1657211 A2 20060517; EP 1657211 A3 20070418; EP 1657211 B1 20081203; US 2006096940 A1 20060511; US 7516858 B2 20090414

DOCDB simple family (application)
DE 202004017771 U 20041116; DE 502005006129 T 20050803; EP 05016876 A 20050803; US 27052105 A 20051110