

Title (en)
Tower crane

Title (de)
Turmdrehkran

Title (fr)
Grue à tour

Publication
EP 0661233 B1 20011219 (DE)

Application
EP 94111263 A 19940719

Priority
DE 9316113 U 19931021

Abstract (en)
[origin: EP0661233A1] A tower crane has a revolving superstructure (3) mounted on a platform (1) to be rotatable about a vertical axis. A bottom tower piece (5) connected to a top tower piece (6) is mounted on the revolving superstructure (3) in an articulated manner about a horizontal transverse axis. Both are connected to one another by a toggle-lever mechanism (35-39). The top tower piece (6) is connected to the revolving superstructure (3) by a link (34). A hydraulic cylinder (15) is linked to the bottom tower piece (5). The piston rod (41) of the hydraulic cylinder (15) is connected in an articulated manner to the toggle-lever mechanism (35-39) in the area of the toggle joint (39). In order to be able to quickly erect the crane and put it back again quickly into its transport position, a supporting frame (20) pivotable about a transverse axis is linked to the side of the revolving superstructure (3) opposite the bottom tower piece (5). The supporting frame (20) is provided with a wheel-carrying steering axle (21) pivotable about a vertical axis (22). A rigid axle (17) provided with wheels (16) is fastened to the underside of the bottom tower piece (5) lying roughly horizontally in the transport position. The supporting frame (20) is held in its road-travelling position by a linkage (27, 29) which is connected to the bottom tower piece (5) and, when the bottom tower piece is pivoted upwards by the hydraulic cylinder (15), likewise pivots the supporting frame (20) so that the platform (1) is lowered onto the building ground. <IMAGE>

IPC 1-7
B66C 23/34

IPC 8 full level
B66C 23/34 (2006.01)

CPC (source: EP)
B66C 23/34 (2013.01); **B66C 23/344** (2013.01); **B66C 23/348** (2013.01)

Cited by
ITTO20110887A1; ITTO20110886A1; US2014093346A1; US9216798B2; CN111508309A; US11840860B2; US10239583B2

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