

## Title (en)

LARGE MANIPULATOR, ESPECIALLY FOR SELF-PROPELLED CONCRETE PUMPS, AND METHOD FOR OPERATING IT

## Title (de)

GROSSMANIPULATOR, INSBESONDERE FÜR AUTOBETONPUMPEN, SOWIE VERFAHREN ZU DESSEN HANDHABUNG

## Title (fr)

MANIPULATEUR DE TAILLE IMPORTANTE, NOTAMMENT POUR POMPES A BETON AUTOMATIQUES, ET SON PROCEDE DE MANIPULATION

## Publication

**EP 0715673 B2 20011121 (DE)**

## Application

**EP 94924288 A 19940726**

## Priority

- DE 4328707 A 19930826
- DE 4412643 A 19940413
- EP 9402460 W 19940726

## Abstract (en)

[origin: WO9506178A1] The invention pertains to a large manipulator, especially for self-propelled concrete pumps. A rotary head (17) that rotates about a vertical axis (18) on a mast stand (16) and a jointed mast (20) composed of at least three mast arms (1 to 5) are mounted on a chassis (10). The mast arms (1 to 5) of the jointed mast (20) can be swivelled to a limited extent about horizontal, mutually parallel joint axes (A to E) relative to the adjoining rotary head (17) or mast arm (20) using a corresponding drive unit (30) in each case. The jointed mast (20) is operated by a remote control device which has a signal transmitter (53) situated at the mast top (55); operated mechanically using a control unit (52), said signal transmitter (53) drives a computerized coordinate field device actuating the drive units (30) of the joint and rotational axes according to a displacement path relative to the momentary position of the mast top (55) as directly indicated by means of the control unit (52).

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**E04G 21/04**; **B66C 23/00**

## IPC 8 full level

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## Citation (opposition)

## Opponent :

- DE 3034912 A1 19810402 - EHRAT KURT DIPL ING
- EP 0113457 A1 19840718 - HITACHI LTD [JP]
- EP 0235779 A1 19870909 - FORSCH STEUERUNGSTECHNIK DER W [DE]
- DE 3240251 A1 19840503 - DEUTSCHE FORSCH LUFT RAUMFAHRT [DE]
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## Cited by

EP2186968A1; WO2008110397A1; DE102019105814A1; EP1882795A3; DE102019105817A1; DE102019105871A1; EP3705662A1; EP3705663A1; DE102007012575A1; US8281811B2; EP3705664A1

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## DOCDB simple family (application)

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