

Title (en)

A mast structure for an industrial lift truck

Title (de)

Maststruktur für einen industriellen Gabelstapler

Title (fr)

Structure de mât pour chariot élévateur industriel

Publication

EP 2380845 A1 20111026 (EN)

Application

EP 11171959 A 20090123

Priority

EP 09151230 A 20090123

Abstract (en)

The invention relates to a mast structure (1) for an industrial lift truck. The mast structure comprises a first mast element (10), which is connected to a load engaging means such as a fork carriage, a second mast element (20), by which the first mast element (10) is carried and along which the first mast element (10) is movable, and a third mast element (30), by which the second mast element (20) is carried and along which the second mast element (20) is movable. A mechanical energy storage and transmission means (50) is provided to transfer force from a movement (M10) of the first mast element (10) to a movement (M20) of the second mast element (20). The mechanical energy storage and transmission means (50) is arranged to be charged by the movement (M10) of the first mast element (10) when the first mast element (10) approaches an end position along the second mast element (20), and to be discharged when a movement (M20) of the second mast element (20) along the third mast element (30) is initiated. Thereby, the energy stored in the mechanical energy storage and transmission means (50) is transferred into a movement (M20) of the second mast structure (20).

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

GB 2264282 A 19930825 - LANSING LINDE LTD [GB]

Citation (search report)

- [X] GB 976247 A 19641125 - ELECTRO HYDRAULICS LTD
- [A] US 5657834 A 19970819 - PLAUGHER RANDALL D [US], et al
- [A] DE 19710556 A1 19980917 - JUNGHEINRICH AG [DE]

Citation (examination)

- US 3789874 A 19740205 - HILLS D
- JP H063257 B2 19940112

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DOCDB simple family (application)

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