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(54) Title: FAILURE PROOF GANTRY CRANE AND CHAIN JACK HOIST ASSEMBLY

(57) Abstract: This patent discloses embodiments of a crane system that provide for high-capacity failure proof operation. For example, an overhead crane system may include a trolley configured to translate between a first position and a second position. The crane system may further include a lift mechanism carried by the trolley or a support span portion of the trolley and be configured to releasably translate a chain between a support position and a lift position. The lift mechanism, in turn, could include a fixed latch configured to engage a first link of the chain, the fixed latch having an open position and a closed position, and a traveling latch movably aligned relative to the fixed latch and configured to engage a second link of the chain, the traveling latch having an open position and a closed position.



WO 2008/083154 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **B66C 19/00(2006.01)**

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 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 212/343

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,519,246 A (BELDING, H) 07 July 1970 (07.07.1970), entire document.	1-2, 4-8, 11-15, 17-19
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Y		3, 9-10, 16
Y	US 3,891,094 A (ANGUS, J.H.) 24 June 1975 (24.06.1975), entire document.	3, 9, 10, 16
Y	US 3,059,782 A (BAUDHUIN, G.J.) 23 October 1962 (23.10.1962), entire document.	3, 9, 10, 16
A	US 3,197,041 A (HERMANN, H.) 27 July 1965 (27.07.1965).	1-19
A	US 5,909,869 A (SANDOY et al.) 08 June 1999 (08.06.1999).	1-19
A	US 3,845,935 A (CHAMBERS, H.B.) 05 November 1974 (05.11.1974).	1-19

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