

**System and docking device for automatically docking a
mobile machine, particularly a container stacker crane, to
a movable supply, and coupling therefor**

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Abstract

A system (10) for automatically docking a container stacker crane (11), in particular a RTG, to a movable supply,
10 having a docking device (14) with a transverse advancer unit (16) and an extendable extension arm (20) of which an end portion (22) can be advanced transversely to the movable supply and connects thereto.

According to the invention, an energy guiding chain (12)
15 with an entrainment member (24) serves as a movable supply. A mechanical coupling is proposed with a coupling piece (26) on the end portion (22) and a coupling counterpart (28) on the entrainment member (24). The entrainment member (24) floatingly supports (34) the coupling counterpart (28)
20 with transverse play. A plug connector (30) on said end portion (22) cooperates with a socket (32) on the entrainment member (24). The mechanical coupling has a coupling piece (26) configured as a funnel (40) and a cooperating coupling counterpart (28) configured as
25 coupling head (42). The coupling head (42) includes at least one extension (44), which cooperates with the funnel (40) and/or a locking bolt (46) for securing perpendicular to the longitudinal direction. The locking bolt (46) cooperates with the extension (44) for securing in the
30 longitudinal direction, and for securing the coupling head (42) in a fixed position.

(FIG.1B)