

CLAIMS

1. A system for determining the position of a container in a vehicle and/or trailer loaded with containers in the loading area for containers (13), such as the container terminal, the container or containers (13) being loaded on the vehicle (16) and/or trailer (17) and correspondingly unloaded therefrom by a crane (10, 10a, 10b) handling containers, moving over a lane or lanes (26, 26a, 26b) in the loading area and provided with a spreader (23, 23a, 23b) grabbing the containers (13) from the top, and with a positioning system for the crane (10, 10a, 10b) and the spreader (23, 23a, 23b), the system for determining the position of a container being provided with a container position determining apparatus arranged in connection with the lane (26, 26a, 26b), characterized in that the container position determining apparatus comprises a fixed structure (1) which is mounted alongside the lane (26, 26a, 26b) and the location of which relative to ground is known, and an indicator (2) that is movable on the fixed structure (1) and can be manually moved to indicate either end of the desired position of a container on a vehicle (16) parked on the lane (26, 26a, 26b) or on a trailer (17) connected thereto, whereupon information about the position of the indicator (2) on the fixed structure (1) is determined and transmitted to the crane (10, 10a, 10b).
2. The system according to claim 1, characterized in that the fixed structure (1) mounted alongside the lane (26, 26a, 26b) is an elongated rail part

allel to the lane (26, 26a, 26b) or the like, along which the indicator (2) is movable.

3. The system according to claim 1 or 2, characterized in that one or more sensors have been provided in connection with the indicator (2) or in the fixed structure (1) to determine the position of the indicator (2) on the fixed structure (1).

4. The system according to any preceding claim, characterized in that the position of the indicator (2) on the fixed structure (1) is arranged to be determined by the positioning and measuring systems of the crane (10, 10a, 10b).

5. The system according to any preceding claim, characterized in that the indicator (2) is provided with a mechanical accessory part (3) extending out from the indicator (2) to the lane (26, 26a, 26b) to reduce distance to a vehicle (16) parked on the lane (26, 26a, 26b) and/or to a trailer (17) connected thereto.

6. The system according to claim 5, characterized in that the accessory part (3) is formed as a fixed part of the actual indicator (2).

7. The system according to any claim 1-4, characterized in that the indicator (2) is provided with a laser sight or suchlike laser light emitting a visible laser line (4), the laser line (4) being pointed out from the indicator (2) to the lane (26, 26a, 26b) and a vehicle (16) parked thereon or a trailer (17) connected to the vehicle.

CLAIMS

1. A system of determining the position of a container in a vehicle and/or trailer loaded with containers in a loading area for containers (13) of a container terminal in which , wherein the system comprises
- 5 a crane (10, 10a, 10b) is configured to load at least one container (13) on the vehicle (16) and/or trailer (17) and correspondingly to unload therefrom and to move over at least one lane (26, 26a, 26b) in the loading area for containers (13), wherein the crane (10, 10a, 10b) comprises
- 10 a spreader (23, 23a, 23b) configured to grab the at least one container (13) from the top, and
- 15 a positioning system for the crane (10, 10a, 10b) and the spreader (23, 23a, 23b),
- a container position determining apparatus
- 20 arranged in connection with the at least one lane (26, 26a, 26b),
- characterized in that the container position determining apparatus comprises
- a fixed structure (1) mounted alongside the
- 25 at least one lane (26, 26a, 26b) and the location of which relative to ground is known,
- an indicator (2) that is movable on the fixed structure (1) and is manually movable to indicate either end of the desired container position on a vehicle (16) parked on the lane (26, 26a, 26b) or on a
- 30 trailer (17) connected thereto, wherein the container position determining apparatus is configured to deter-

mine information about the position of the indicator (2) on the fixed structure (1) and to transmit the information to the crane (10, 10a, 10b), and

5 one or more sensors provided in connection with the indicator (2) or in the fixed structure (1) configured to determine the position of the indicator (2) on the fixed structure (1).

2. The system according to claim 1, characterized in
10 that the fixed structure (1) mounted alongside the lane (26, 26a, 26b) is an elongated rail parallel to the at least one lane (26, 26a, 26b), along which the indicator (2) is movable.

15 3. The system according to any preceding claim, characterized in that the position of the indicator (2) on the fixed structure (1) is arranged to be determined by the positioning and measuring systems of the crane (10, 10a, 10b).

20 4. The system according to any preceding claim, characterized in that the indicator (2) is provided with a mechanical accessory part (3) extending out from the indicator (2) to the lane (26, 26a, 26b) to reduce distance to a vehicle (16) parked on
25 the lane (26, 26a, 26b) and/or to a trailer (17) connected thereto.

5. The system according to claim 4, characterized
30 in that the accessory part (3) is formed as a fixed part of the actual indicator (2).

6. The system according to any claim 1-5, characterized in that the indicator (2) is provided with a laser sight or suchlike laser light emitting a visible laser line (4), the laser line (4) being
5 pointed out from the indicator (2) to the lane (26, 26a, 26b) and a vehicle (16) parked thereon or a trailer (17) connected to the vehicle.