

Abstract

Operating method for a loading system and automation system for controlling a loading system

The invention relates to an operating method for a loading system designed to load or move a load (L) along a route (x), with which during the loading process for avoiding a collision between the load (L) and objects in the environment (U)

- a digital load image file (LBD) describing a spatial overall extent of the load (L) is provided,
- an environment image file (UBD) is recorded cyclically by means of an imaging sensor system (10),
- a protective distance (SA) is added to the data of the load image file (LBD) and a collision model image file (KMB) is thus provided and
- a cutout file (VAD) is provided as a virtually recorded image file with a viewing angle from the load (L) as a function of the route (x), wherein the cutout file (VAD) is obtained as a reduced representation from the environment image file (UBD),
- a differential image file (DBD) is provided from the collision model image file (KMD) and the cutout file (VAD) by means of differentiation,
- an evaluation step is carried out, wherein the differential image file (DBD) is examined for a possible collision.

Fig. 2