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(54) **Title:** OBJECT DETECTION SYSTEM AND METHOD FOR DETECTING FOREIGN OBJECTS IN AN INDUCTIVE POWER TRANSFER SYSTEM

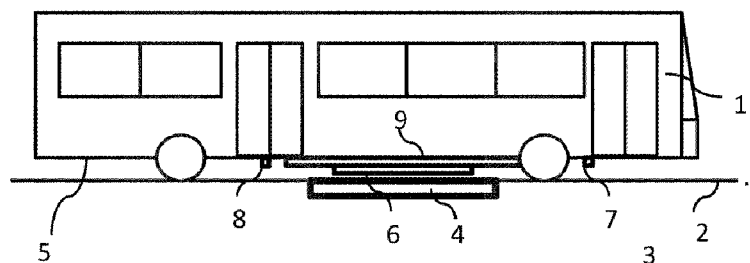


Fig. 1

(57) **Abstract:** The invention relates to an object detection system for an inductive power transfer system, in particular for transferring power to a vehicle (1) on a surface (2) of a route (3), wherein the inductive power transfer system comprises a primary winding structure and a secondary winding structure, wherein a charging volume (CV) is assigned to the inductive power transfer system during inductive power transfer, wherein the object detection system comprises at least one sensing device, wherein the sensing device has a detection volume (10), wherein the at least one sensing device is arranged such that the detection volume (10) is fully arranged outside the charging volume (CV) or comprises only an edge portion of the charging volume (CV). Furthermore, the invention relates to a method for detecting a foreign object, an inductive power transfer system and a vehicle.