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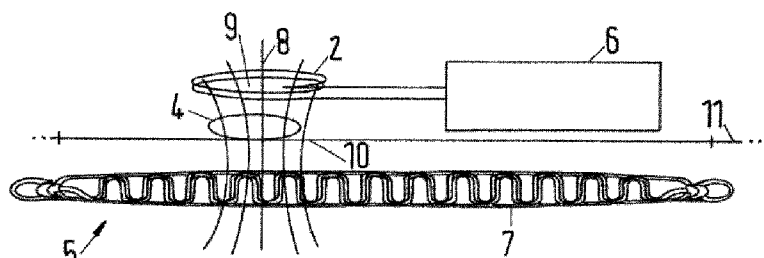


Fig.2

(57) Abstract: A safety system, a method of operating a safety system and a method of building a safety system The invention relates to a Safety system for an inductive power transfer system for transferring power to a vehicle on a surface of a route (11), wherein the primary unit comprises at least one primary winding (7) for generating an electromagnetic primary field for the inductive power transfer, wherein a charging surface (10) of the route (11) is assigned to the primary winding, wherein the safety system (5) comprises at least one inductive sensing system, wherein the inductive sensing system comprises multiple detection windings (2) wherein the multiple detection windings (2) are arranged in an array structure (27), wherein the array structure (27) covers the charging surface (10) at least partially. Furthermore, the invention relates to a method of operating such a safety system and a method of building such a safety system.