

Steering drive system for a vehicle with wheel-based steering, vehicle with wheel-based steering and method for the operation thereof

Abstract

Steering drive system (11) for a wheel side steered vehicle, comprising a coupling element (20) which can be coupled to output drives (14, 15) of the vehicle in order, when an amount of a superposition rotational speed of the coupling element (20) is greater than zero, to provide at the output drives (14, 15), which are driven at a basic rotational speed on the basis of a travel drive system (10) of the vehicle, for steering the vehicle a superposition rotational speed which is to be superposed on the basic rotational speed, comprising at least one first electric machine (29) whose rotational speed can be variably set or controlled, with a power summation and/or power branching unit (25), wherein a first connection (25a) of the power summation and/or power branching unit (25) is coupled to a shaft (26) which can be coupled, in particular via a defined transmission ratio, to a shaft (16) of the travel drive system (10), wherein a second connection (25b) of the power summation and/or power branching unit (25) is coupled to the at least one first electric machine (29), wherein a third connection (25c) of the power summation and/or power branching unit (25) is coupled to the coupling element (20), in particular via at least one defined transmission ratio.

(Fig. 1)