

Title (en)  
ELECTRIC DRIVE SYSTEM

Title (de)  
ELEKTRISCHES ANTRIEBSSYSTEM

Title (fr)  
SYSTÈME D'ENTRAÎNEMENT ÉLECTRIQUE

Publication  
**EP 4251458 A1 20231004 (DE)**

Application  
**EP 21814679 A 20211110**

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Abstract (en)  
[origin: WO2022111754A1] The invention relates to an electric drive system (1) for a vehicle (100) which can be operated by muscle power. The drive system (1) comprises a first electrical machine (2) which can be operated at least as a motor and acts on a drive wheel (101) of the vehicle (100) for drive purposes, and also a second electrical machine (3) which can be operated at least as a generator and is designed to convert mechanical energy introduced via a crank device (10) by a driver of the vehicle (100) into electrical energy. The drive system (1) also comprises an energy storage device (4) for storing and emitting electrical energy and a central control unit (5) for driving the first electrical machine (2) and for driving the second electrical machine (2). According to the invention, the control unit (5) is designed here to drive the electrical machine (2) which can be operated as a motor depending on the target torque (MG\_target) for the electrical machine (3) which can be operated as a generator.

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