

(54) **COMMUNICATION IN A WIRELESS POWER TRANSFER SYSTEM**

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(57) **ABSTRACT**
A power transfer system comprises a power transmitter (101) wirelessly providing power to a power receiver (105) via an inductive power transfer signal. Communication from power receiver (105) to the power transmitter (101) is by load modulation using the power transfer signal. The communication uses load modulation where each symbol is represented by a chip sequence being a sequence of modulation load values. The power transmitter (101) comprises a first communicator (207) which correlates a chip sequence received from the power receiver with a set of reference chip sequences being linked to data symbol values and determines the data symbol as the data symbol linked to a reference chip sequence for which the highest correlation with the first chip sequence is determined.

