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(54) **POWER TRANSMISSION DEVICE AND
WIRELESS POWER TRANSMISSION
SYSTEM**

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ABSTRACT

A power transmission device includes power transmission coils arranged in a line, a power transmission circuit connected to the power transmission coils, and control circuitry that switches an electrical connection between the power transmission circuit and each power transmission coil, detects a relative position between the power receiving coil and each power transmission coil, selects two or more power transmission coils adjacent to each other based on the detected relative position, and causes the power transmission circuit to supply the AC power to the selected two or more power transmission coils. In a direction perpendicular to an array direction of the power transmission coils, width Dlt of each power transmission coil is equal to or longer than width Dlr of the power receiving coil. In the array direction, width Dwt of each power transmission coil is shorter than width Dwr of the power receiving coil and satisfies $0.2 \leq Dwt/Dwr$.

