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Sadakata et al.

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(54) **POWER FEED DEVICE OF INDUCTIVE CHARGING DEVICE**

(58) **Field of Classification Search**

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(Continued)

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Related U.S. Application Data

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(30) **Foreign Application Priority Data**

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H02J 17/00 (2006.01)

(Continued)

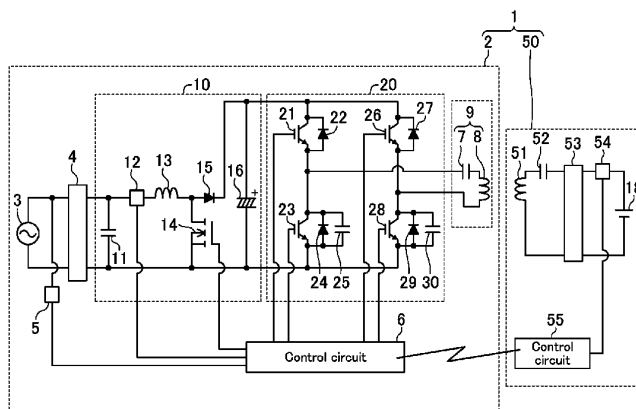
(52) **U.S. Cl.**
CPC **H02M 1/14** (2013.01); **H02J 7/025** (2013.01); **H02J 17/00** (2013.01); **H02J 50/10** (2016.02);

(Continued)

(57) **ABSTRACT**

A power feeding device of a non-contact charging device includes a power factor improvement circuit which converts an AC power supply to DC, and improves a power factor, a smoothing capacitor connected to an output end of the power factor improvement circuit, an inverter circuit which includes a plurality of switching elements, and generates an AC signal using a voltage of the smoothing capacitor as a power supply, a power feeding section which feeds power based on the AC signal to a power receiving device, and a control circuit which modulates a duty factor of each of the switching elements of the inverter circuit in synchronization

(Continued)



with the AC power supply, wherein the control circuit controls the plurality of switching elements so that an increment of the modulated duty factor is not equal to a decrement of the modulated duty factor.

2 Claims, 7 Drawing Sheets

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H02J 7/02 (2016.01)
H02J 50/10 (2016.01)
H02J 50/80 (2016.01)
H02M 1/00 (2006.01)
- (52) **U.S. Cl.**
 CPC *H02J 50/80* (2016.02); *H02M 1/4208*
 (2013.01); *H02M 1/4225* (2013.01); *H02M*
2001/007 (2013.01); *Y02B 70/126* (2013.01)
- (58) **Field of Classification Search**
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 See application file for complete search history.

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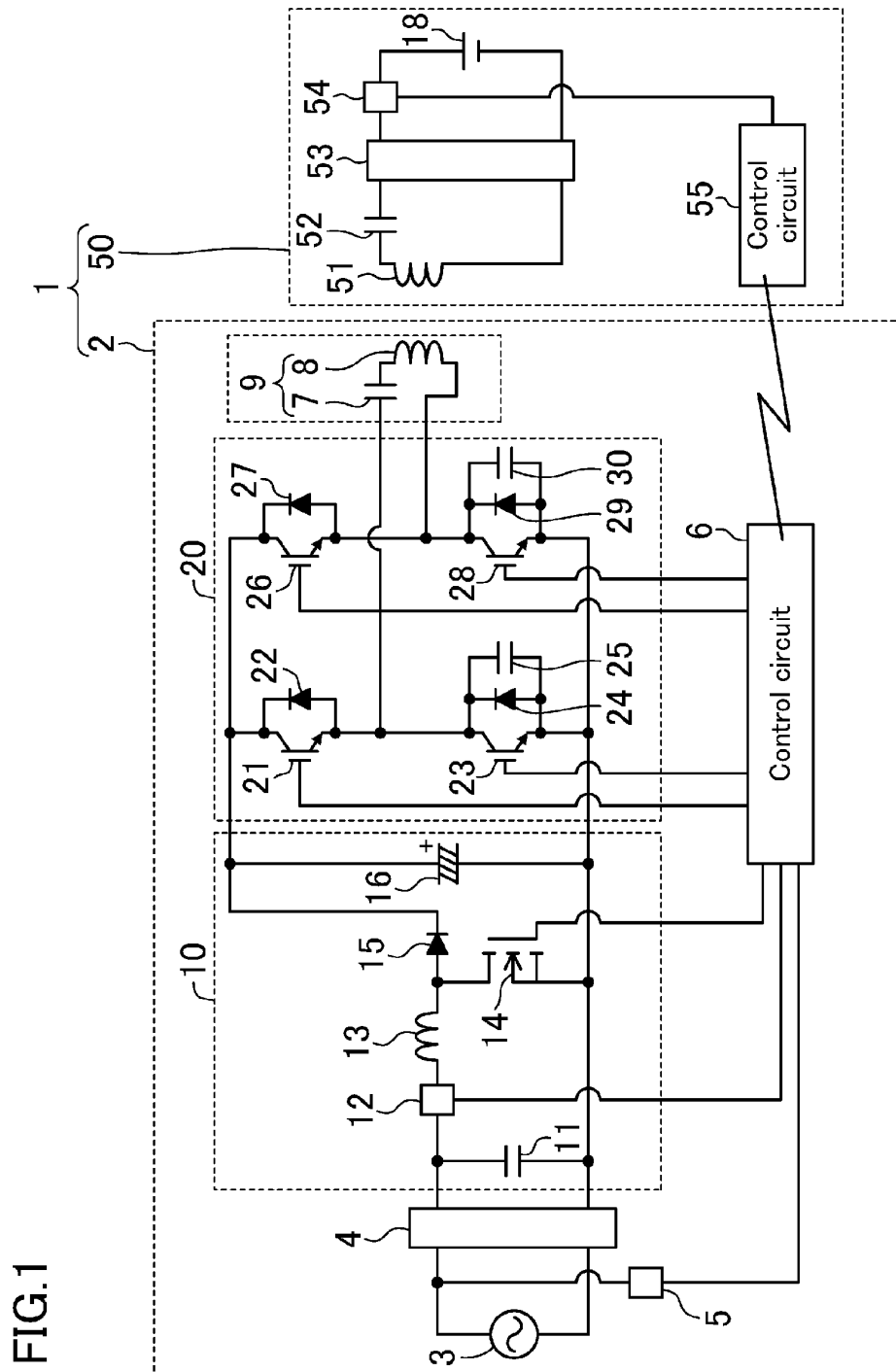


FIG.2

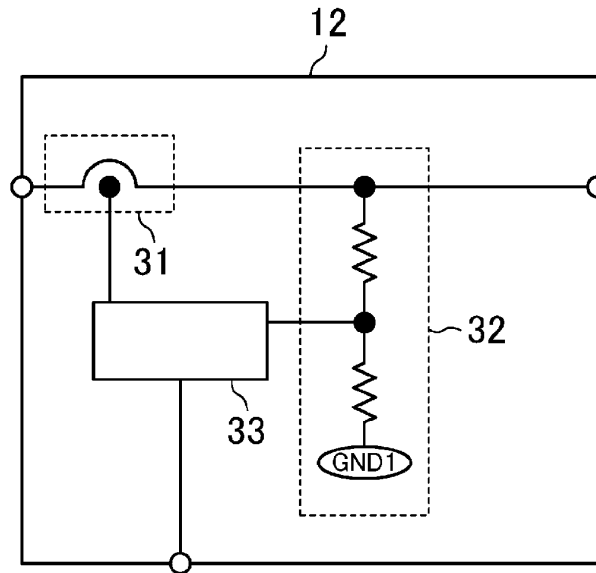
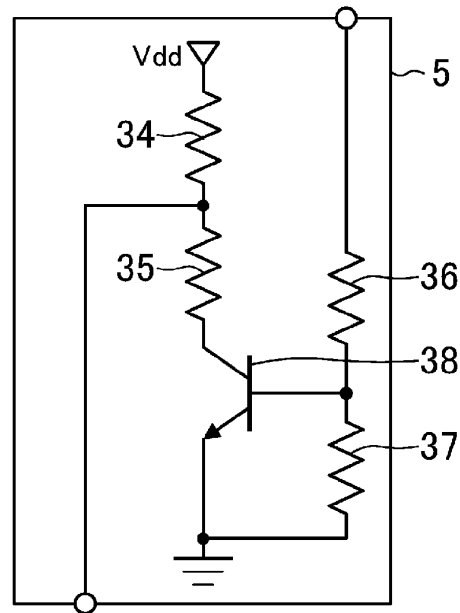
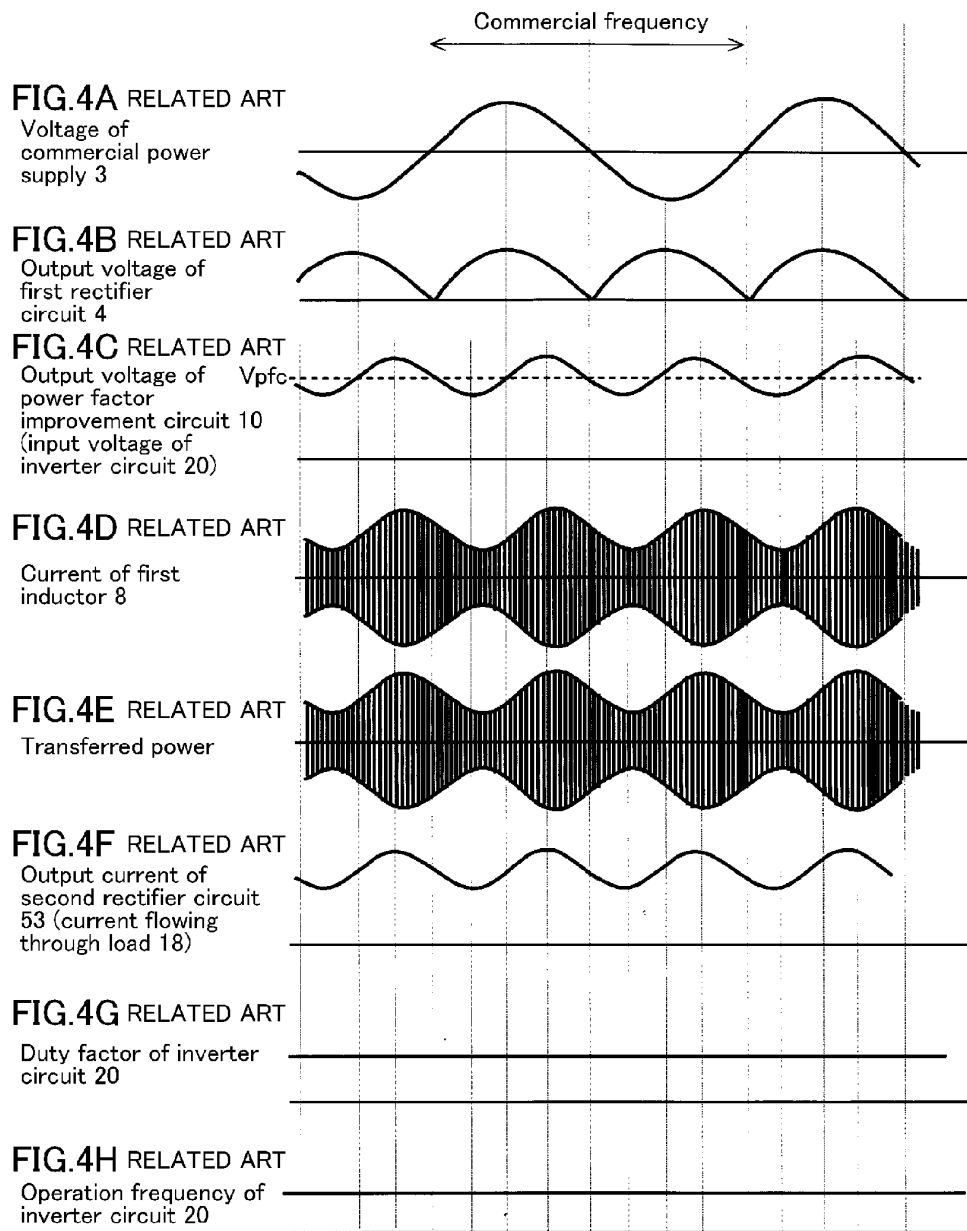


FIG.3





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