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**Taylor et al.**

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(54) **SYSTEM AND METHOD FOR COMMUNICATION IN WIRELESS POWER SUPPLY SYSTEMS**

(51) **Int. Cl.**  
*H01J 5/00* (2006.01)  
*H04B 5/00* (2006.01)  
(Continued)

(71) Applicant: **Philips IP Ventures B.V.**, Eindhoven (NL)

(52) **U.S. Cl.**  
CPC ..... *H02J 50/80* (2016.02); *H02J 5/005* (2013.01); *H02J 7/025* (2013.01); *H02J 50/12* (2016.02);  
(Continued)

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(58) **Field of Classification Search**  
CPC ..... H02J 5/005; H04B 5/0031; H04B 5/0037; H04B 5/0087; Y02B 60/50; Y10T 307/406  
See application file for complete search history.

(73) Assignee: **PHILIPS IP VENTURES B.V.**, Eindhoven (NL)

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 531 days.

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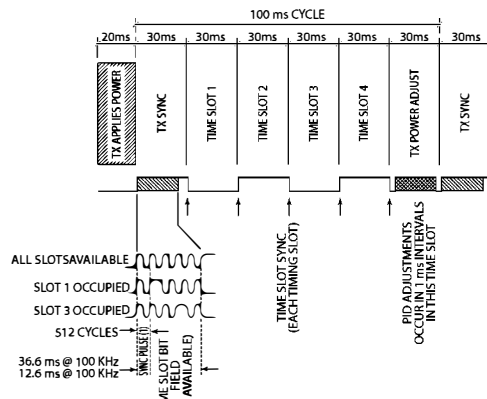
**Related U.S. Application Data**

(60) Provisional application No. 61/649,341, filed on May 20, 2012, provisional application No. 61/649,561, filed on May 21, 2012.

(57) **ABSTRACT**

The present invention relates to wireless power supplies adapted to supply power and communicate with one or more remote devices. The systems and methods of the present

(Continued)



invention generally relate to a communication timing system that may ensure information being communicated does not overlap with that of another device, preventing data collisions and information from going undetected. With information being communicated in a way that addresses or avoids potential communication issues in multiple device systems, the wireless power supply may control operation to effectively supply wireless power.

**25 Claims, 8 Drawing Sheets**

(51) **Int. Cl.**

*H02J 50/80* (2016.01)  
*H02J 50/12* (2016.01)  
*H02J 7/02* (2016.01)  
*H02J 50/60* (2016.01)  
*H02J 5/00* (2016.01)

(52) **U.S. Cl.**

CPC ..... *H02J 50/60* (2016.02); *H04B 5/0031* (2013.01); *H04B 5/0037* (2013.01); *H04B 5/0087* (2013.01); *Y10T 307/406* (2015.04)

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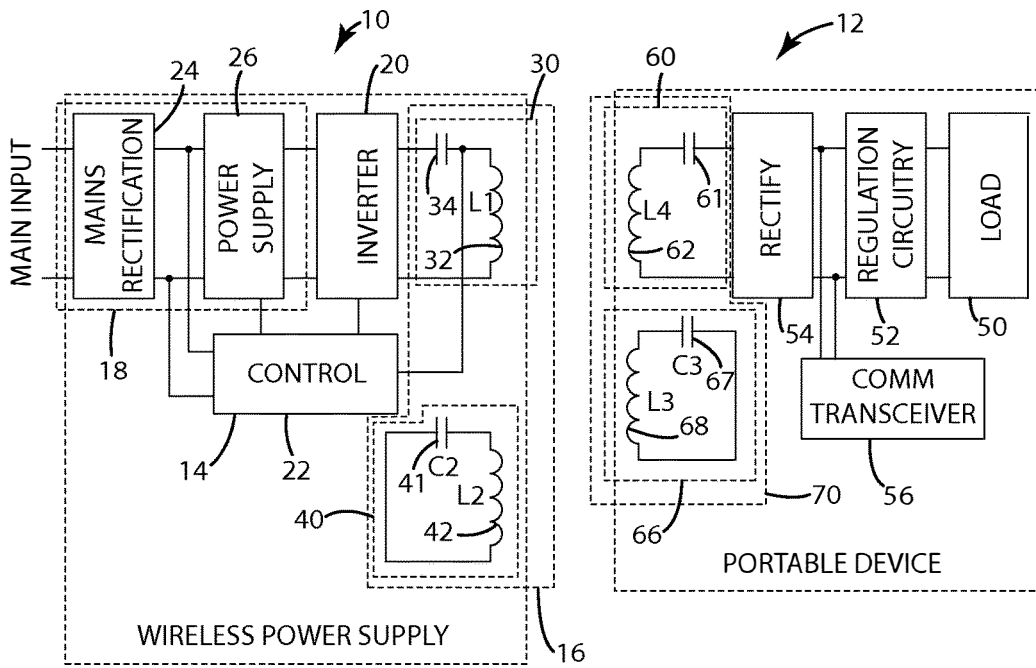


Fig. 1

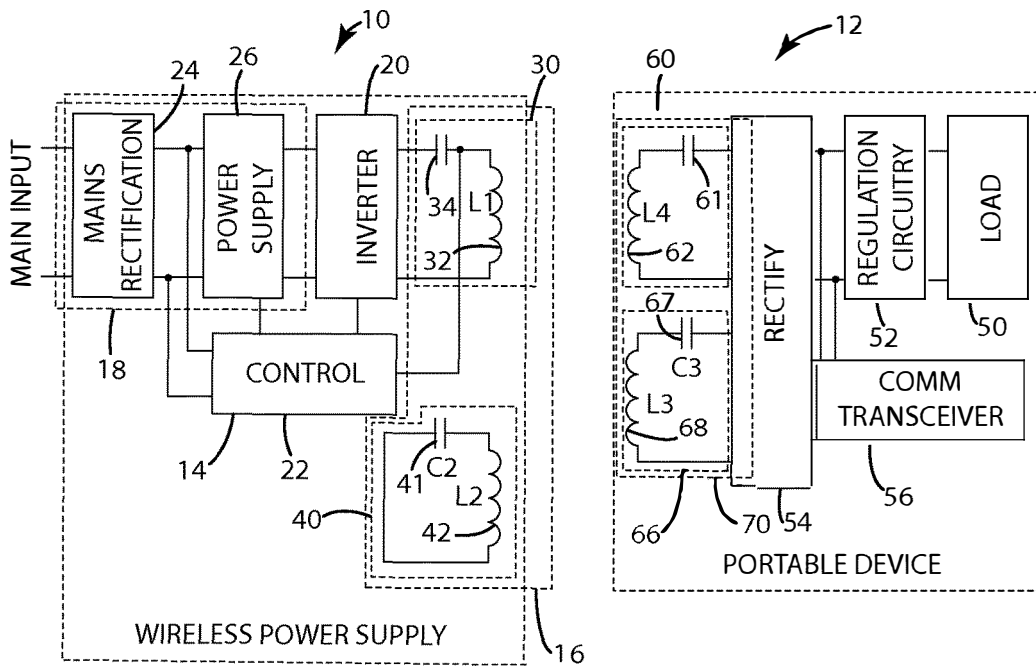


Fig. 2

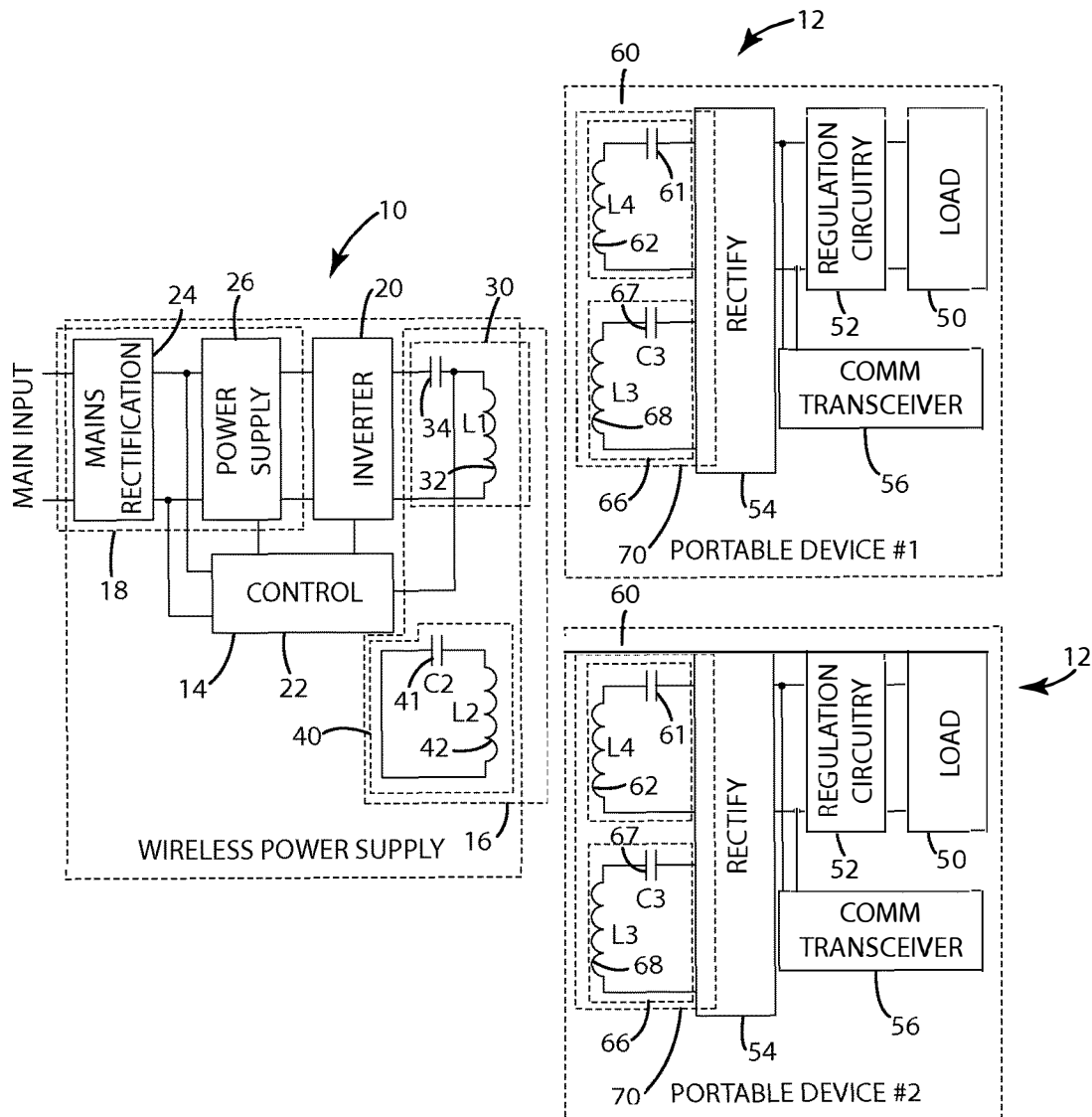


Fig. 3

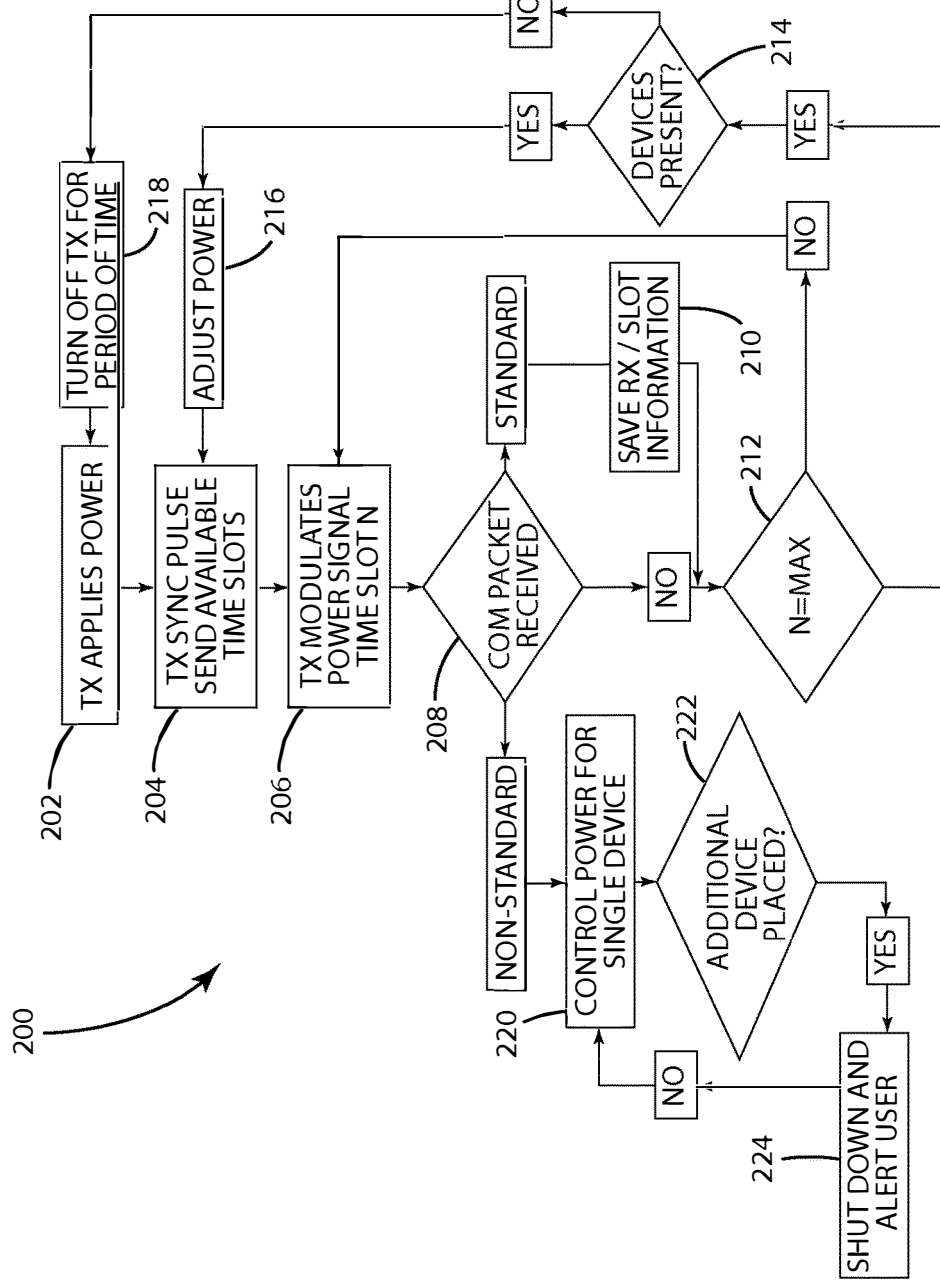


Fig. 4

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