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**Thorstensen et al.**(10) **Pub. No.: US 2022/0352759 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **WIRELESS CHARGING OF DEVICES****H02J 50/40** (2006.01)**H02J 50/80** (2006.01)**H02J 7/35** (2006.01)(71) Applicant: **SINTEF TTO AS**, Trondheim (NO)(72) Inventors: **Jostein Thorstensen**, Trondheim (NO);  
**Tobias Gulden Dahl**, Trondheim (NO)(52) **U.S. Cl.**CPC ..... **H02J 50/30** (2016.02); **H04B 10/807**  
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Disclosed is a method of operating an array of receiver devices as a phased array. The receiver devices are in a fixed mutual relationship within a zone and each receiver device comprises a photovoltaic element. The method involves receiving a signal from within the zone at a plurality of the receiver devices to generate a plurality of received signals and processing the received signals using at least one phase difference therebetween. The method also involves directing a beam of light from a unit located within the zone to the photovoltaic elements, thereby providing power to said receiver devices. The invention extends to an array of transmitter devices and to an array of both transmitter and receiver devices.

