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(54) **METHOD FOR BEAM ALIGNMENT IN POINT-TO-POINT OPTICAL WIRELESS COMMUNICATION SYSTEMS**

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(57) **ABSTRACT**

A transmitter (**100**) for use in an optical wireless communication system, the transmitter (**100**) comprising a main optical transmitter front end (**150**) configured to send data on a first frequency band to a remote receiver (**200**) for data communication; and send a beacon signal on a first frequency channel to the remote receiver (**200**); a plurality of auxiliary optical transmitter front ends (**160***a*, **160***b*, **160***c*) configured to send beacon signals on the first frequency channel to the remote receiver (**200**); wherein the beacon signals sent by the main (**150**) and the auxiliary optical transmitter front ends (**160***a*, **160***b*, **160***c*) are used to assist a beam alignment procedure between the main optical transmitter front end (**150**) and the remote receiver (**200**) for data communication; and a first controller (**109**) configured to generate individual beacon signals for the main and the plurality of auxiliary optical transmitter front ends according to a synchronous CDMA method, with each beacon signal comprising a unique identifier corresponding to the