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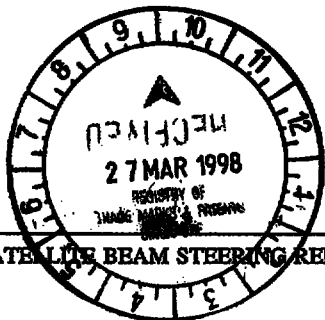


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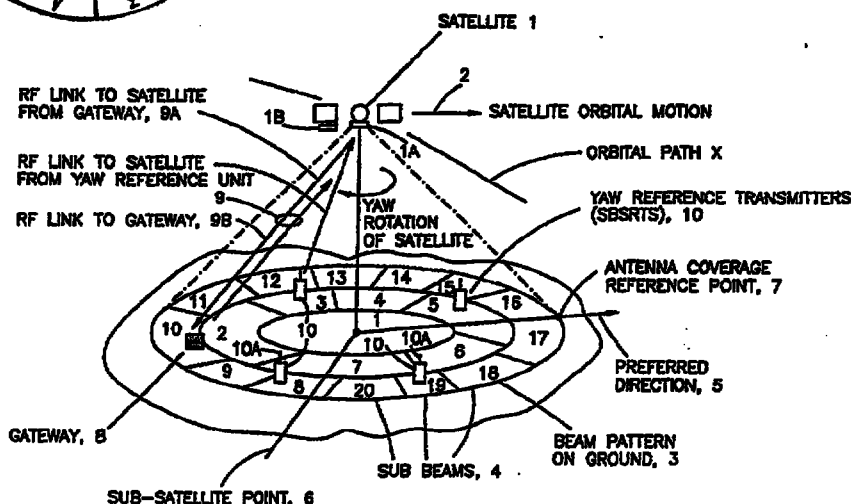
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(54) Title: **SATELLITE BEAM STEERING REFERENCE USING TERRESTRIAL BEAM STEERING TERMINALS**



(57) Abstract

A satellite communication system has at least one satellite (1) with an antenna that generates a moving beam pattern (3) on the surface of the earth. The beam pattern (3) comprises a plurality of sub-beams (4). A method for determining an attitude correction signal for the satellite (1) comprising: providing a reference transmitter on Earth; transmitting a signal from the transmitter into one of the sub-beams; receiving the signal with the satellite antenna and transponding the signal to a ground station (8); receiving the transponded signal with the ground station (8); determining a gain of the received signal; comparing the determined gain to a gain expected to be received based on predetermined knowledge of the satellite antenna characteristics; and determining a difference between the determined gain and the expected gain to derive a correction signal indicative of an attitude error of the satellite (1).