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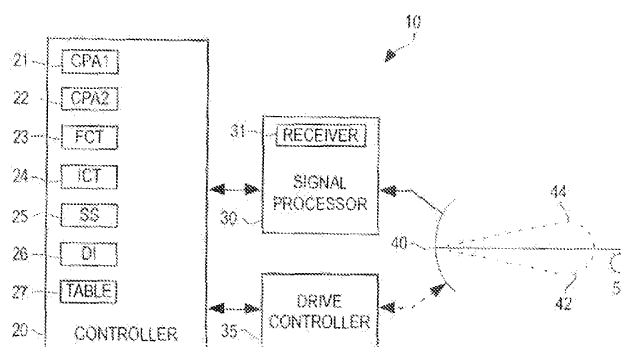
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(54) Title: TRACK HIGHLY INCLINED SATELLITES WITH NOISE AFFECTED SIGNALS

FIG. 1



(57) Abstract: A satellite tracking system and method, a three-point peaking technique is used to determine the direction of a satellite 50 which includes a signal source. A Kalman filter is used to minimize the effects of noise in the received signal during the three-point peaking operation. This determination may be made at any time. Once the position of a satellite 50 has been determined twice over a time interval, its future position may be estimated by an adaptive continuous step track technique, using a Kalman filter, which assumes that the satellite moves uniformly with time as viewed from the antenna.

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