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(54) **PULSE ERROR CORRECTION FOR SPINNING VEHICLES**

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USPC ..... 701/38, 48, 96, 99, 110, 301; 116/200; 244/3.1, 164, 3.16; 180/6.5, 197, 248, 180/249; 192/104 R; 342/16, 357.59; 303/113.4; 280/6.15; 102/384; 343/705; 89/41.22, 204; 124/87; 235/404; 434/20, 22
See application file for complete search history.

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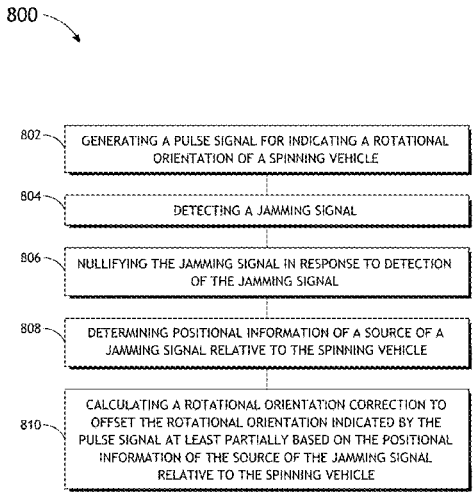
(57) **ABSTRACT**

Apparatus and methods for pulse error correction are disclosed. The apparatus may include a spinning vehicle having a plurality of antennas for generating pulse signals indicative of the rotational orientation of the spinning vehicle. The apparatus may utilize anti-jamming to detect and nullify a jamming signal. The apparatus may apply pulse error correction to correct inaccuracies in the pulse signals indicative of the rotational orientation of the spinning vehicle. More specifically, positional information of a source of the jamming signal relative to the spinning vehicle and positional information of a satellite relative to the spinning vehicle may be determined and utilized to calculate a rotational orientation correction.

20 Claims, 9 Drawing Sheets