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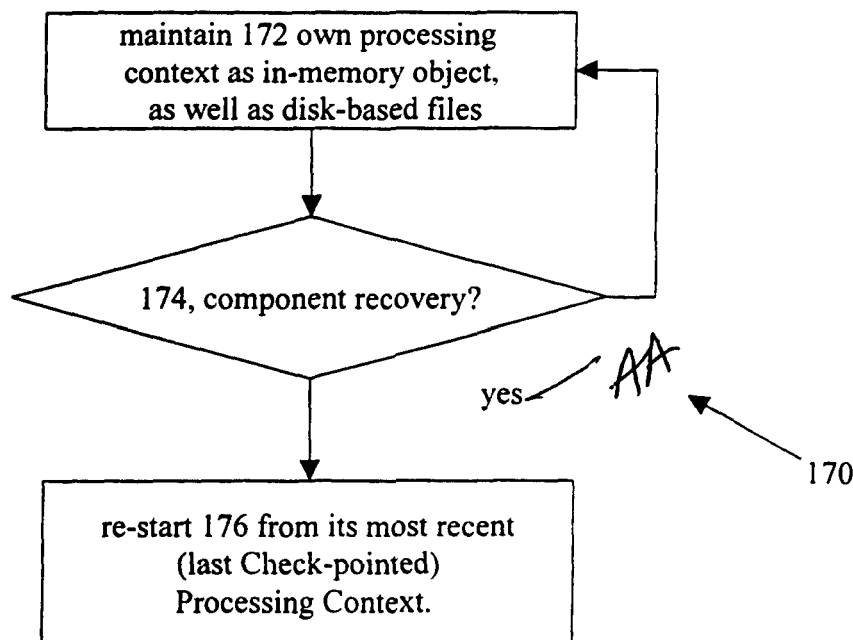
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(54) Title: TIME ACQUISITION IN A WIRELESS POSITION DETERMINATION SYSTEM



(57) Abstract: A system and method for providing timing information to a wireless device in a position determination system is disclosed. A wireless device includes a reference signal receiver, a signal processor, a wireless communications transceiver and a GPS receiver. The wireless device is adapted to receive a reference signal, extract a snippet of the received reference signal, determine a time of reception for the snippet and transmit the snippet and time of reception to a position determination entity as part of a request for GPS aiding information. The position determination entity includes a timing source, a GPS memory for storing GPS satellite information, a reference signal memory, a communications interface, a signal

processor and a control processor. The position determination entity is adapted to continually receive and store a reference signal along with an associated time of reception, and receive the snippet and timestamp transmitted from the wireless device. The position determination entity is further adapted to match the signal snippet to a portion of the stored reference signal, determine a time offset between the timestamp and the time of reception of the matched portion of the stored reference signal, prepare aiding information for the wireless device, synchronize the aiding information to the wireless device using the time offset, and transmit the synchronized aiding information to the wireless device. The wireless device is further adapted to receive the aiding information, including timing information to assist the wireless device in acquiring the GPS signal.

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