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(54) **ACQUISITION, COLLECTION AND PROCESSING SYSTEM FOR CONTINUOUS PRECISION TRACKING OF OBJECTS**

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(58) **Field of Classification Search** .....  
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See application file for complete search history.

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(57) **ABSTRACT**

A system and method autonomously and precisely track objects moving along a known course. The objects include, for example, racing horses, other racing animals, or racing vehicles. The system and method utilize modern satellite navigation satellite systems, signal processing, radio communications systems and computer processing to acquire and analyze performance data of the moving objects during competitions and during training and practice. The data acquisition is performed continuously at a rate of at least 1 Hz during the competition, training or practice even in the presence of objects which affect the quality of the signals received from the satellite system.

**33 Claims, 9 Drawing Sheets**

