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(54) Title: EFFORTLESS NAVIGATION ACROSS CAMERAS AND COOPERATIVE CONTROL OF CAMERAS

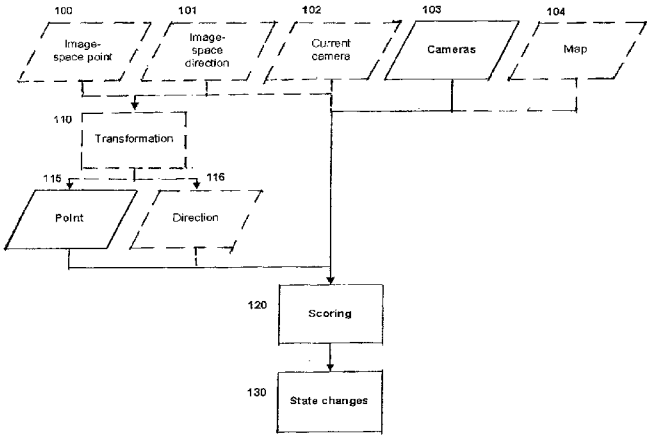

Figure 1 – High-level overview diagram of the navigation algorithm

FIG. 1

(57) Abstract: This application discloses a system and related methods (called Fast Track) to effortlessly navigate across multiple cameras, e.g. video surveillance cameras distributed in a facility. Fast Track simplifies the act of following a suspicious individual roaming in a facility, e.g. by eliminating the need for security operators to memorize camera placement and coverage, and to manually control pan-tilt-zoom (hereinafter "PTZ") cameras, and by simplifying the process to reduce the risk of operator error. Combinations of novel scoring and control methods generally provide an automatic identification of optimal cameras and pre-emptive re-direction of PTZ cameras. Extensions to these methods enable two new capabilities: Cooperative PTZ Control (e.g. coordinating PTZs to cover a 3D map viewport optimally) and Self- Healing Perimeters, to automatically reassign and redirect multiple PTZ cameras to fill gaps in a security perimeter.

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