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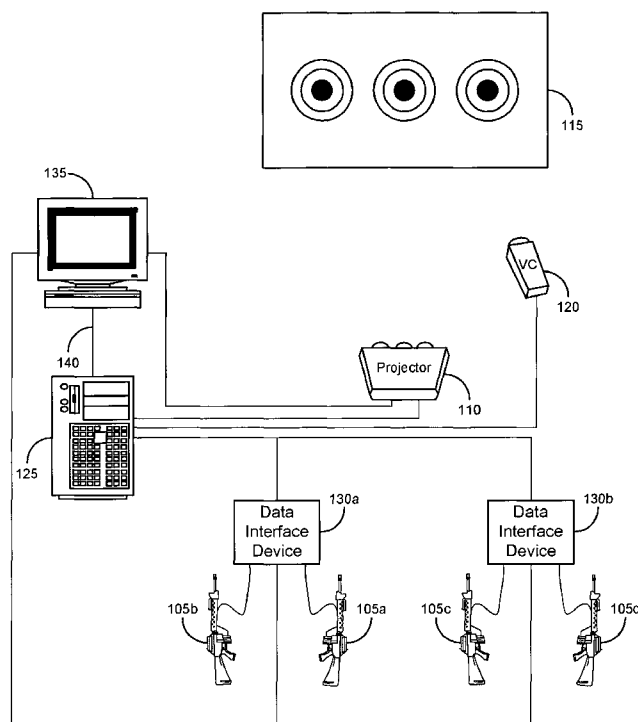
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(54) Title: ENHANCEMENT OF AIMPOINT IN SIMULATED TRAINING SYSTEMS



(57) Abstract: Embodiments of the invention, therefore, provide improved systems and methods for tracking targets in a simulation environment. Merely by way of example, an exemplary embodiment provides a reflected laser target tracking system that tracks a target with a video camera and associated computational logic. In certain embodiments, a closed loop algorithm may be used to predict future positions of targets based on formulas derived from prior tracking points. Hence, the target's next position may be predicted. In some cases, targets may be filtered and/or sorted based on predicted positions. In certain embodiments, equations (including without limitation, first order equations and second order equations) may be derived from one or more video frames. Such equations may also be applied to one or more successive frames of video received and/or produced by the system. In certain embodiments, these formulas also may be used to compute predicted positions for targets; this prediction may, in some cases, compensate for inherent delays in the processing pipeline.

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