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(54) Title: SYSTEMS AND METHODS FOR ENHANCED MOTION DETECTION, OBJECT TRACKING, SITUATIONAL AWARENESS AND SUPER RESOLUTION VIDEO USING MICROSCANNED IMAGES

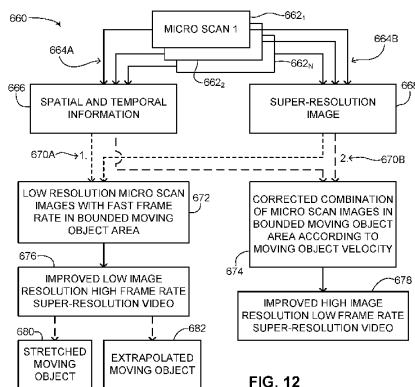


FIG. 12

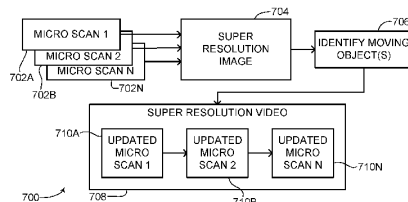


FIG. 13A

(57) Abstract: Method for displaying super-resolution video of at least one moving object without image artifacts using a plurality of microscanned images, including the procedures of acquiring microscanned images of at least one moving object, a first and second subset of the images respectively forming a first and second data set, for each data set, analyzing at least a portion of the subset of the images for spatial and temporal information, determining a respective movement indication of the moving object according to the spatial and temporal information, in parallel to the procedure of analyzing, forming a respective super-resolution image from each data set and designating a respective bounded area surrounding the moving object, and repeatedly displaying each super-resolution image outside the bounded area a plurality of times at a video frame rate and displaying during those times within the respective bounded area, a plurality of consecutive microscanned images of the moving object at the video frame rate.

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