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(54) Title: DEFECT DETECTION BY IMAGE PROCESSING

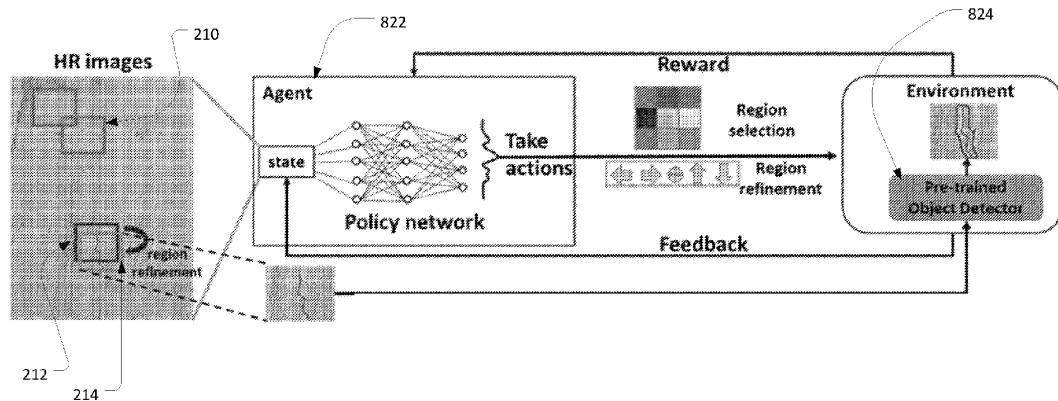


Figure 2(a)

(57) Abstract: Method and systems for defect detection in images by processing the target image using a reinforcement learning agent (RL agent) provided in a memory accessible to the processor to identify a coarse defect region in the target image, processing each coarse defect region using an object detection model (OD model) provided in the memory to identify a sub-region of the coarse defect region corresponding to a defect; wherein the OD model is trained using a low-resolution image dataset; and the RL agent is trained using a high-resolution image dataset.

[Continued on next page]

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