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(54) **Title:** REAL-TIME SAVING OF HIGH-RESOLUTION IMAGES ON COMMERCIAL AUTOMATED VISUAL INSPECTION (AVI) SYSTEMS

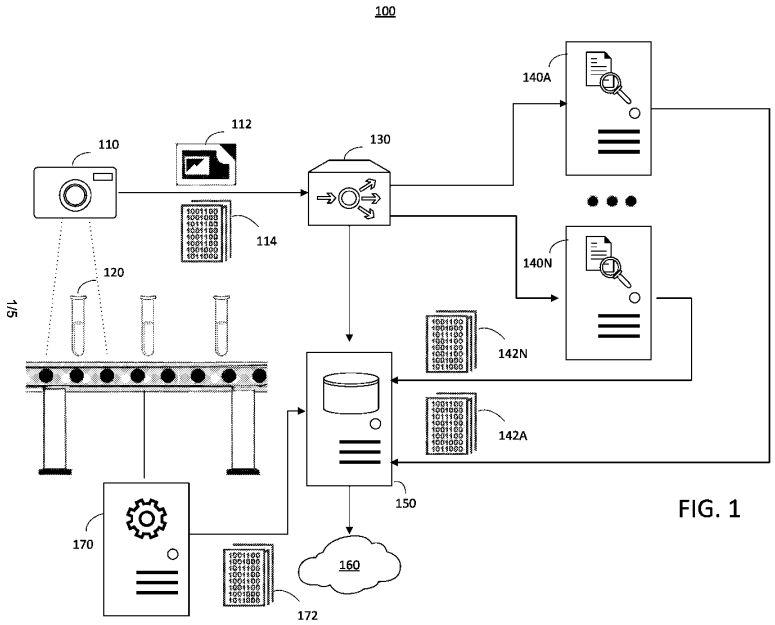


FIG. 1

(57) **Abstract:** An automated visual inspection (AVI)-based method may include: generating, using an imaging unit, image data of a product; receiving, at a first image analysis hardware unit, the image data from a hardware image splitter; analyzing, using the first image analysis hardware unit, the image data for product defects using a first visual inspection analysis; generating, using the first image analysis hardware unit, first image processing metadata based on the first visual inspection analysis; receiving, at an image storage hardware unit, the image data from the hardware image splitter; storing, using the image storage hardware unit, the image data into a buffer; receiving, at an image storage hardware unit, the first image processing metadata; and/or associating, using the image storage hardware unit, the inspection metadata that includes the first image processing metadata with the image data.

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