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(54) Title: A LINE CLEARANCE SYSTEM

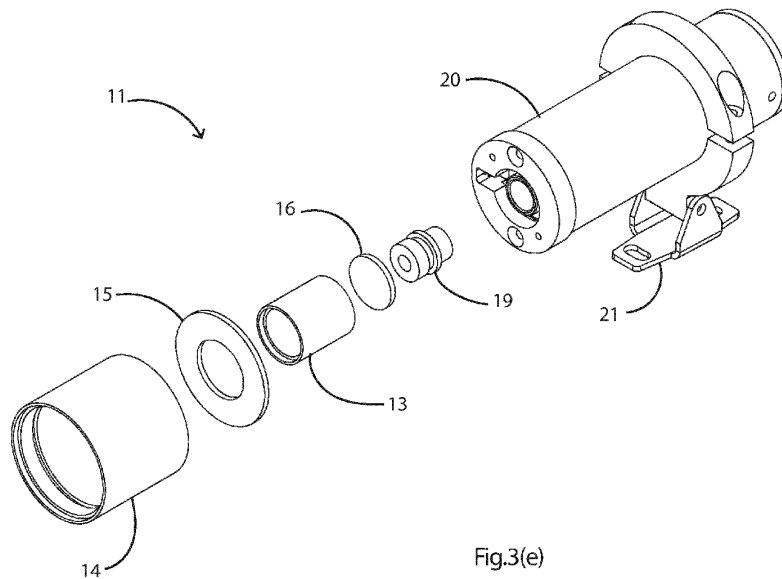


Fig.3(e)

(57) Abstract: A line clearance system has cameras (4, 11) and distributed processors (10) for image processing to generate an output for line clearance. The system may control activation of manufacturing equipment according to line clearance outputs. The cameras are connected in at least one cluster (5) linked to a switch (3), in turn linked with a server having the digital data processors. The splitter is also linked to a strobe controller (53) for control of strobe lighting in synchronisation with camera image capture. The cameras have a ring of LEDs (12) recessed proximal to a lens cover (16) at the distal-most end, thereby preventing glare into the camera arising from high-intensity illumination which is required for many confined and inaccessible spaces in a production line. There is comprehensive processing of live and reference images with generation of histograms, warping, medial blurring, masking, difference detection, contour finding and generation of a result according to the contour processing (501 to 553).

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