

ABSTRACT

"IMAGE DETECTION SYSTEM"

According to one embodiment, an image detection system includes an imaging apparatus (101), an edge
5 extraction unit (103), a specific-edge extraction unit (105), a candidate area extraction unit (106), and a to-be-detected area determination unit (107). The imaging apparatus (101) is installed at an optional position. The edge extraction unit (103) extracts
10 edges each representing a boundary line between areas with different features, from an image acquired by the imaging apparatus (101). The specific-edge extraction unit (105) compares edges preliminarily extracted from a background image with edges extracted from an input
15 image to extract specific edges including at least remaining edges present in both images. The candidate area extraction unit (106) extracts candidate areas for a preset area to be detected, from the input image. The to-be-detected area determination unit (107)
20 determines the area to be detected from candidate areas extracted by the candidate area extraction unit (106), based on the specific edges extracted by the specific-edge extraction unit (105).

[FIG. 1]