APPARATUS FOR RECOGNIZING OBJECTS BASED ON ARTIFICIAL INTELLIGENCE (AI) AND METHOD THEREFOR

ABSTRACT

A method of recognizing objects includes: extracting, by a source detection unit, a plurality of representative images for each image source and human object by tracking a plurality of human objects in each of a plurality of consecutive frames of each of a plurality of image sources; deriving, by a source feature detection unit, a plurality of source feature vectors representing features of the plurality of representative images through a feature extraction model which is a deep learning model; deriving, by a target feature detection unit, a target feature vector representing a feature of the query image through the feature extraction model when a query image, which is the image of the human object to be re-identified, is input; deriving, by a re-identification unit, a similarity between the human object to be re-identified and the human object of the plurality of representative images by calculating a similarity between the target feature vector and the plurality of source feature vectors by a re-identification unit; and providing, by the re-identification unit, representative images in order of the derived high similarity.

Fig. 1