

CLAIMS

1. An information processing apparatus communicatively connected to ~~an plurality of~~ image sensors that is installed at the ceiling of a building and captures an
5 images of a surroundings of a control target device, which is to be a target of power controlling, so as to detect any one of presence/absence of people, a density of people, and an amount of activity of people, comprising:
- 10 an attribute information generation unit that generates, by using ~~anthe~~ images captured by ~~each of the~~ image sensors, attribute information of the control target device which is under jurisdiction of ~~at least one of the~~ image sensors; ~~and~~
- 15 a management unit that manages the attribute information of the control target device generated by the attribute information generation unit in association with the control target device and ~~the at least one of the~~ image sensors having jurisdiction over the control target device;
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- a demand control unit that controls the control target device on the basis of any one of presence/absence of people, a density of people, and an amount of activity of people detected by the image sensor.
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2. The information processing apparatus according to claim 1, wherein the attribute information generation unit recognizes a predetermined character string included in
30 ~~anthe~~ images captured by the image sensors, and generates the recognized character string as the attribute information.
3. The information processing apparatus according to

claim 1 or 2, wherein the attribute information generation unit detects an image in which a change occurs in accordance with powering on of the control target device from ~~the~~ images captured by ~~each of the~~ respective image sensors, and generates attribute information in which ~~at least one of the~~ image sensors that captured the image is associated with the powered-on electric~~control~~ target device.

4. The information processing apparatus according to claim 3, wherein the attribute information generation unit specifies a relative positional relationship of the powered-on control target device with respect to ~~the at least one of the~~ image sensors from a state of the change in the detected image, and generates information representing the positional relationship as the attribute information.

5. The information processing apparatus according to claim 4, wherein the attribute information generation unit divides an imaging range of ~~the at least one of the~~ image sensors based on the specified relative positional relationship, and generates attribute information in which each of divided detection areas is associated with the control target device which belongs to the each of detection areas.

6. The information processing apparatus according to claim 5, further comprising a determination unit that determines whether or not the detection areas overlap each other between the image sensors based on identity of the control target device associated with the detection areas

of the image sensors.

7. The information processing apparatus according to claim 6, further comprising an overlap resolution unit that assigns the control target device, which belongs to the each of detection areas determined to overlap by the determination unit, between the image sensors associated with the detection areas.

8. The information processing apparatus according to claim 6, further comprising an addition unit that adds ~~indication~~instruction information, which indicates overlapping, to the detection areas of the respective image sensors determined to overlap by the determination unit.

9. The information processing apparatus according to any one of claims 1 to 8, further comprising a storage unit that stores layout information indicating an arrangement position and a layout of each of objects including the control target device and the image sensors installed in each room,

wherein the attribute information generation unit recognizes, from the images captured by the ~~image~~ sensors, the layout of an~~the~~ object included in the images, and generates arrangement positions of the control target device and ~~the at least one of the~~ image sensors specified from the layout information similar to the recognized layout as the attribute information.

10. The information processing apparatus according to claim 9, wherein, by using the attribute information generated for the control target device and ~~the at least~~

~~one of the image sensors~~ of the specified layout, the attribute information generation unit generates attribute information of other control target device and other image sensor having a layout similar to the specified layout.

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11. The information processing apparatus according to claim 3, wherein, when the change cannot be detected from the image captured by ~~the each of the image sensors~~ at the time of turning on the control target device, the attribute information generation unit generates attribute information in which the control target device is associated with other sensor device, after completing the generation of the attribute information of each of the image sensors.

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12. An information processing method performed by an information processing apparatus communicatively connected to an plurality of image sensors that is installed at the ceiling of a building and captures an images of a surroundings of a control target device, which is to be a target of power controlling, so as to detect any one of presence/absence of people, a density of people, and an amount of activity of people, the method comprising:

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an attribute information generation step in which, by an attribute information generation unit generates, by using an image captured by the image sensor, attribute information of the control target device which is under jurisdiction of at least one of the image sensors by using the images captured by each of the image sensors; and

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a management step in which, by a management unit manages, the attribute information of the control target device generated by the attribute information generation unit in association with the control target device and ~~the~~

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~~at least one of the image sensors having jurisdiction over the control target device; and~~

a demand control step in which the control target device is controlled on the basis of any one of presence/absence of people, a density of people, and an amount of activity of people detected by the image sensor.

13. A program causing a computer of an information processing apparatus, which is communicatively connected to ~~an plurality of image sensors that is installed at the ceiling of a building and captures an images of a~~ surroundings of a control target device, which is to be a target of power controlling, so as to detect any one of presence/absence of people, a density of people, and an amount of activity of people, to function as:

an attribute information generation unit that generates, by using ~~anthe images captured by each of the~~ image sensors, attribute information of the control target device which is under jurisdiction of ~~at least one of the~~ image sensors; ~~and~~

a management unit that manages the attribute information of the control target device generated by the attribute information generation unit in association with the control target device and ~~the at least one of the image sensors having jurisdiction over the control target device;~~ and

a demand control unit that controls the control target device on the basis of any one of presence/absence of people, a density of people, and an amount of activity of people detected by the image sensor.