# DESCRIPTION

Title Of Invention: GATE APPARATUS, CONTROL METHOD OF GATE APPARATUS, AND STORAGE MEDIUM

[Technical Field]

[0001]

The present invention relates to a gate apparatus, a control method of a gate apparatus, and a storage medium.

[Background Art]

[0002]

Emigration and immigration examination is performed at airports. An officer in charge of the emigration and immigration examination compares a photograph of a face attached to a passport and the face of a person in front of the officer. If the face image in the passport does not match the face of the person in front of the officer, the emigration and immigration of the person is not permitted.

[0003]

In recent years, apparatuses that automatically perform the above emigration and immigration examination have been introduced. For example, in the gate apparatus disclosed in Non-Patent Literature 1, emigration and immigration examination is performed by comparing the pre-registered biological information with the biological information acquired by the gate apparatus.

[Citation List]

[Non patent literature]

[0004]

[NPL 1] Ministry of Justice, "Operation of Automated Gates (Notice)," [online], [2019]. [retrieved December], Internet <URL:http://www.moj.go.jp/nyuukokukanri/kouhou/nyuukokukanri01_00111.html>

[Summary ~~of Invention~~]

[Technical Problem]

[0005]

In the emigration and immigration examination, the content thereof differs between Japanese and foreigners. Specifically, the

emigration and immigration examination for foreigners requires the acquisition of information described on ED (Embarkation Disembarkation) cards or the like.

[0006]

Thus, the examination content differs for Japanese and foreigners, but it is difficult to install dedicated devices (gate apparatus such as those disclosed in NPL 1) for each in airports. The reason for this is that the number of each varies depending on the time of day and other factors, making it inefficient. Therefore, it is realistic that a single apparatus can handle both Japanese and foreigners' examination.

[0007]

However, if such an apparatus configuration is adopted, a situation may arise where examination is completed quickly by one device and not easily by another due to the difference in examination content between Japanese and foreigners. In this case, users waiting for emigration and immigration examination may not know which apparatus to line up in front of, and users who line up at the examination apparatus where examination is slow may become frustrated.

[0008]

It is a principal object of the present ~~invention~~ disclosure to provide a gate apparatus, a control method of a gate apparatus, and a storage medium that contribute to users being able to easily grasp the status of emigration and immigration examination.

[Solution to Problem]

[0009]

According to a first aspect of the present ~~invention~~disclosure, there is provided a gate apparatus including: a progress indicator that indicates progress of procedures related to emigration and immigration examination of an examination target user; and a control unit that controls the progress indicator depending on the nationality of the examination target user.

[0010]

According to a second aspect of the present ~~invention~~disclosure, there is provided a control method of a gate apparatus including a

progress

indicator that indicates progress of procedures related to an emigration and immigration examination of an examination target user, the method including: identifying a nationality of the examination target user; and controlling the progress indicator depending on the identified nationality of the examination target user.

[0011]

According to a third aspect of the present ~~invention~~disclosure, there is provided a ~~computer readable storage medium storing a~~ program that causes a computer mounted on a gate apparatus, the gate apparatus being including a progress indicator that indicates progress of procedures related to an emigration and immigration examination of an examination target user, to perform processing for: identifying a nationality of an examination target user; and controlling a progress indicator depending on the identified nationality of the examination target user.

[Advantageous Effects of Invention]

[0012]

The individual aspects of the present invention provide a gate apparatus, a control method of a gate apparatus, and a storage medium that contributes to users being able to easily grasp status of emigration and immigration examination. The advantageous effects of the present invention are not limited to the above advantageous effect. The present invention may provide other advantageous effects, instead of or in addition to the above advantageous effect.

[Brief Description of the Drawings]

[0013]

[Fig. 1] Fig. 1 is a diagram illustrating an outline of an example embodiment.

[Fig. 2] Fig. 2 is a diagram illustrating an example of a schematic configuration of an emigration and immigration examination system according to a first example embodiment.

[Fig. 3] Fig. 3 is a diagram illustrating an example of a processing configuration of a server apparatus according to the first example embodiment.

[Fig. 4] Fig. 4 is a diagram illustrating an example of a hardware

CLAIMS

1. A gate apparatus comprising:

a progress indicator that indicates progress of procedures related to an emigration and immigration examination of an examination target user; and

a control unit that controls the progress indicator depending on a nationality of the examination target user.

2. The gate apparatus according to claim 1, further comprising an acquisition unit for acquiring information described in a machine readable zone of a passport, wherein the control unit identifies the nationality of the examination target user based on the information described in the machine readable zone.

3. The gate apparatus according to claim 1 or 2, wherein the control unit controls the progress indicator so that a person waiting for examination can recognize a timing when the emigration and immigration examination in progress will be completed.

4. The gate apparatus according to claim 3, wherein the control unit controls the progress indicator using a progressive interval that defines an interval upon advancing a display of the progress indicator from an initial state toward an end-of-examination state related to the emigration and immigration examination of the examination target user.

5. The gate apparatus according to claim 4, wherein the control unit changes a value to be set for the progressive interval depending on the nationality of the examination target user.

6. The gate apparatus according to claim 5, wherein the value to be set for the progressive interval is determined based on an average value of time required for the emigration and immigration examination for each user of different nationalities.

7. The gate apparatus according to any one of claims 4 to 6, wherein a value of the progressive interval set when the examination target user is a Japanese is smaller than a value of the progressive interval set when the examination target user is a foreigner.

8. The gate apparatus according to any one of claims 1 to 7, wherein the control unit starts controlling the progress indicator when the

nationality of the examination target user can be acquired, and terminates controlling the progress indicator when the emigration and immigration examination of the examination target user is completed.

9. The gate apparatus according to claim 3, wherein the control unit controls the progress indicator depending on a status of the emigration and immigration examination for the examination target user.

10. The gate apparatus according to claim 9, wherein the control unit changes the control of the progress indicator depending on a different number of examination procedures depending on the nationality of the examination target user.

11. The gate apparatus according to claim 9 or 10, wherein the control unit advances the display of the progress indicator at a start of a particular procedure and further advances the display of the progress indicator at an end of the particular procedure in the examination of the examination target user.

12. The gate apparatus according to any one of claims 3 to 7, wherein the progress indicator is installed in a position that is visible to the person waiting for examination.

13. A control method of a gate apparatus comprising a progress indicator that indicates progress of procedures related to an emigration and immigration examination of an examination target user, the method comprising:

identifying a nationality of the examination target user; and

controlling the progress indicator depending on the identified nationality of the examination target user.

14. A ~~computer readable storage medium, storing a~~ program that causes a computer mounted on a gate apparatus, the gate apparatus being comprising a progress indicator that indicates progress of procedures related to an emigration and immigration examination of an examination target user, to perform processing for:

identifying a nationality of an examination target user; and

controlling a progress indicator depending on the identified nationality of the examination target user.