[0005]

The storage compartment of the conventional refrigerator is separated in the up-down direction by transparent shelves. However, when a number of pieces of food are placed on the transparent shelves, the food blocks light emitted from the illumination device disposed in the ceiling of the storage compartment. As a result, the inside of the storage compartment becomes dark and food is not clearly visible.

[0006]

~~The~~Example embodiments of the present invention ~~is~~are proposed in order to address the above described problem and provides a refrigerator in which, even when food is pulled forward from the storage compartment or pulled forward in the storage compartment, the food can still be illuminated. The ~~present invention~~example embodiments also provides a refrigerator in which the inside of the storage compartment can be more brightly illuminated.

[Solution to Problem]

[0007]

~~A~~ In accordance with an aspect, there is provided ~~refrigerator according to the present invention includes a storage compartment, at least one shelf, a first illumination device, and a second illumination device. The at least one shelf is formed of a light-transmissive material and separates the storage compartment in an up-down direction. The first illumination device is provided in a ceiling of the storage compartment at a position closer to a front side than a substantially central portion in a depth direction of the storage compartment and emits light directed toward the front side of the storage compartment with respect to a position immediately below the first illumination device. The second illumination device is provided below one of the at least one shelves and emits light directed toward the front side of the storage compartment.~~ a refrigerator comprising: a storage compartment; at least one shelf that is formed of a light-transmissive material and separates the storage compartment in an up-down direction;

a first illumination device that is provided in a ceiling of the storage compartment at a position closer to a front side of the storage compartment than a substantially central portion in a depth direction of the ceiling of the storage compartment, a direction of a center line of an area to be illuminated by the first illumination device is inclined toward the front side of the storage compartment with respect to a position immediately below the first illumination device; and a second illumination device that is provided below one of the at least one shelves and emits light directed toward the front side of the storage compartment, wherein the storage compartment is illuminated from above by light from the first illumination device and from below by light emitted from the second illumination device through the one of the at least one shelves.

[Advantageous Effects of Invention]

[0008]

~~According to the present invention~~In example embodiments, the first illumination device is provided in the ceiling of the storage compartment at the position closer to the front side than the substantially central portion in the depth direction of the storage compartment and emits light directed toward the front side of the storage compartment with respect to

the position immediately below the first illumination device. Thus, when the user pulls forward food from the storage compartment, the food is illuminated by at least part of light emitted from the first illumination device. Thus, food becomes more clearly visible when the user takes the food out of the storage compartment.

[0009]

According to ~~the present invention~~In example embodiments, the second illumination device is also provided below one of the at least one shelves and emits light directed toward the front side of the storage compartment. Thus, the inside of the storage compartment is illuminated from above by light emitted from the first illumination device and from below by light emitted from the second illumination device. Since the inside of the storage compartment can be brightly illuminated, food in the storage compartment becomes more clearly visible. Furthermore, when the light from the first illumination device is blocked by, for example, food placed on the shelf of the storage compartment, a portion of the storage compartment below the shelf can be illuminated by the light from the second illumination device.

[Brief Description of Drawings]

[0010]

[Fig. 1] Fig. 1 is a front view of a refrigerator according to Embodiments 1 and 2 with doors of the refrigerator removed.

[Fig. 2] Fig. 2 is a schematic sectional view of the refrigerator according to Embodiments 1 and 2 taken along line A-A in Fig. 1.

[Fig. 3] Fig. 3 is a perspective view of a main portion of a first illumination device according to Embodiments 1 and 2.

[Fig. 4] Fig. 4 is a perspective view of the main portion of the first illumination device according to Embodiment 1 with a cover of the first illumination device removed.

[Fig. 5] Fig. 5 is a perspective view of a main portion of a second illumination device according to Embodiments 1 and 2.

[Fig. 6] Fig. 6 is a perspective view of the main portion of the second illumination device according to Embodiment 1 with a cover of the second illumination device removed.