where one individual disposable seating-surface cover is positioned in a state of use, wherein when an individual seating-surface cover of the roll is in a state of use, it lies directly on a seating surface of a toilet-seat, such that the aperture of the individual seating-surface cover is parallel to an aperture of said toilet seat; wherein said first and second housings are physically connected by supporting rails or arms; c) an optical reader located at said first housing and/or said second housing, wherein said optical reader is configured to capture visual information of said control indication and to translate the captured visual information into digital information that reflects a triggering signal that indicates when to stop the feeding process of said cover, as to enable the preset displacing movement; d) a bracket arrangement adapted to install said device to said toilet seat in a way that allows said device to pivot away from said toilet seat when said device is not in use; and e) a lifting arm for enabling a hands-free lifting/lowering of a toilet seat flap of the toilet seat, wherein said device is designed to automatically provide, according to need, a new individual seating-surface cover over a toilet-seat by: lowering the device onto the toilet-seat and rolling a new individual seating-surface cover over the toilet seat, and by automatically lifting the device from the toilet-seat after use.

According to a second aspect of the present invention, there is provided a roll of disposable seating-surface covers, wherein said roll is a long strip layer that comprises plurality of similar apertures, each of which defines an individual seating-surface cover, wherein said roll comprises a control indication located adjacent to each of said aperture to indicate when to stop the feeding process of each individual seating-surface cover, wherein said control indication is in form of a printed sign suitable to be read by an optical reader, wherein said strip is wrapped around a cylindrical core suitable to be inserted into the device as defined in the first aspect.

According to a third aspect of the present invention, there is provided method for providing a disposable seating-surface cover for a toilet-seat by using the device as defined in the first aspect, comprising: a) providing a first housing adapted to feed a disposable seating-surface cover roll installed therein, wherein said roll is a long strip layer that comprises plurality of apertures and a control indication located adjacent to each aperture, so that each aperture defines an individual seating-surface cover;

b) providing a second housing adapted to receive and collect the roll by connecting an initial edge of said roll to a rotational mechanism situated in said second housing that is adapted to pull said roll such that each individual disposable seating-surface cover follows a preset displacing movement where one individual disposable seating-surface cover is positioned in a state of use, wherein when an individual seating-surface cover of the roll is in a state of use, it lies directly on a seating surface of a toilet-seat, such that the aperture of the individual seating-surface cover is parallel to an aperture of said toilet seat; and c) capturing, by an optical reader, visual information of said control indication and translating said captured visual information into digital information that reflects a triggering signal that indicates when to stop the feeding of said cover, as to enable the preset displacing movement of each individual seating-surface cover.

According to an embodiment of the invention, the rotational mechanism includes a cylindrical member driven by a motor that turns said cylindrical member, and on which said disposable seating-surface covers are wrapped around when said cylindrical member turns.

In another aspect, the present invention relates to a disposable seating-surface cover roll, wherein said roll is a long strip of made of at least one layer, wherein the strip comprises plurality of similar apertures, each of which defines an individual seating-surface cover.

According to an embodiment of the invention the strip is wrapped around a cylindrical core.

According to an embodiment of the invention the initial edge of the strip includes an engaging member, such as a rod.

Brief Description of the Drawings

In the drawings:

- Fig. 1 schematically illustrates a perspective view of device for providing a disposable seating-surface cover for a toilet-seat, according to an embodiment of the invention;
- Fig. 2 schematically illustrates a side view of the device of Fig. 1;
- Fig. 3 schematically illustrates a bottom view of the device of Fig. 1;

CLAIMS

1. A device for providing a disposable seating-surface cover for a toilet-seat, comprising:

a) a first housing adapted to feed a disposable seating-surface cover roll installed therein, wherein said cover roll is a long strip layer that comprises plurality of apertures and a control indication located adjacent to each aperture, so that each aperture defines an individual seating-surface cover;

b) a second housing adapted to receive and collect the roll by connecting an initial edge of said roll to a rotational mechanism situated in said second housing that is adapted to pull said roll such that each individual disposable seating-surface cover follows a preset displacing movement where one individual disposable seating-surface cover is positioned in a state of use, wherein when an individual seating-surface cover of the roll is in a state of use, it lies directly on a seating surface of a toilet-seat, such that the aperture of the individual seating-surface cover is parallel to an aperture of said toilet seat, wherein said first and second housings are physically connected by supporting rails or arms;

c) an optical reader located at said first housing and/or said second housing, wherein said optical reader is configured to capture visual information of said control indication and to translate the captured visual information into digital information that reflects a triggering signal that indicates when to stop the feeding process of said cover, as to enable the preset displacing movement;

d) a bracket arrangement adapted to install said device to said toilet seat in a way that allows said device to pivot away from said toilet seat when said device is not in use; and

e) a lifting arm for enabling a hands-free lifting/lowering of a toilet seat flap of the toilet seat,

wherein said device is designed to automatically provide, according to need, a new individual seating-surface cover over a toilet-seat by: lowering the device onto the toilet-seat and rolling a new individual seating-surface cover over the toilet seat, and by automatically lifting the device from the toilet-seat after use.

2. A device according to claim 1, in which the rotational mechanism includes a cylindrical member driven by a motor that turns said cylindrical member, and on which said disposable seating-surface covers are wrapped around when said cylindrical member turns.

3. A device according to claim 1, further comprising a toilet seat flap and a toilet lid, thereby providing a toilet seat kit with the disposable seating-surface cover.

4. A device according to claim 1, in which the control indication is at least one sign printed on each individual disposable seating-surface cover.

5. A device according to claim 1, in which the disposable seating surface cover roll includes an engaging member and the second housing includes a corresponding clip member(s) adapted to secure the engaging member to the cylindrical member, such that each turning of the cylindrical member will pull the disposable seating surface cover from the first housing into said second housing.

6. A device according to claim 1, in which the feeding process is applied by using electronic, kinematic, hydraulic and/or pneumatic construction.

7. A roll of disposable seating-surface covers, wherein said roll is a long strip layer that comprises plurality of similar apertures, each of which defines an individual seating-surface cover, wherein said roll comprises a control indication located adjacent to each of said

aperture to indicate when to stop the feeding process of each individual seating-surface cover, wherein said control indication is in form of a printed sign suitable to be read by an optical reader,
wherein said strip is wrapped around a cylindrical core suitable to be inserted into the device of any one of claims 1-6.

8. A roll according to claim 7, in which the edge of the strip includes an engaging member adapted to be secured to a housing adapted to receive and collect the roll.

9. A roll according to claim 8, in which the engaging member is a rod.

10. A method for providing a disposable seating-surface cover for a toilet-seat by using the device of any one of claims 1-6, comprising:

a) providing a first housing adapted to feed a disposable seating-surface cover roll installed therein, wherein said roll is a long strip layer that comprises plurality of apertures and a control indication located adjacent to each aperture, so that each aperture defines an individual seating-surface cover;
b) providing a second housing adapted to receive and collect the roll by connecting an initial edge of said roll to a rotational mechanism situated in said second housing that is adapted to pull said roll such that each individual disposable seating-surface cover follows a preset displacing movement where one individual disposable seating-surface cover is positioned in a state of use, wherein when an individual seating-surface cover of the roll is in a state of use, it lies directly on a seating surface of a toilet-seat,

such that the aperture of the individual seating-surface cover is parallel to an aperture of said toilet seat; and

c) capturing, by an optical reader, visual information of said control indication and translating said captured visual information into digital information that reflects a triggering signal that indicates when to stop the feeding of said cover, as to enable the preset displacing movement of each individual seating-surface cover.