Claims

1. A sliding door system (100) for installing into a building wall (106), the sliding door system (100) comprising:

a sliding door (102) comprising at least a first door leaf (114), a second door leaf (116), and a pivoting mechanism (118); and

a housing (104) for installing into the building wall (106), the housing (104) having a first door opening (108) and a second door opening (110) opposite the first door opening (108);

wherein the sliding door (102) is mounted in the housing (104) so as to be displaceable beyond the first door opening (108) and the second door opening (110) on both sides;

wherein the pivoting mechanism (118) is designed to convert a displacement movement of the sliding door (102) into a pivoting movement of the first door leaf (114) and the second door leaf (116), so that the first door leaf (114) exposes the first door opening (108) and the second door leaf (116) exposes the second door opening (110) in a first position of the sliding door (102) and said door leaves close said door openings in a second position of the sliding door (102), wherein the pivoting mechanism serves to change the distance between the first door leaf (114) and the second door leaf (116), and the pivoting mechanism makes it possible, in order to reach the first position, to move the door leaves (114, 116) so close to one another that the door leaves (114, 116) can be inserted into the left housing portion (126), wherein the pivoting mechanism makes it possible, in the second position, to spread the door leaves (114, 116) so far apart that the outer surfaces of the door leaves (114, 116) are flush with the outer surface of the housing (104), wherein the first door leaf (114) and the second door leaf (116) are arranged, in the first position, at least partially in a left housing portion (126) of the housing (104) located on the left next to the first door opening (108) and the second door opening (110) and, in the second position, at least partially between the first door opening (108) and the second door opening (110),

wherein by deactivation of the pivoting mechanism (118) the sliding door (102) is displaceable beyond the first door opening (108) and the second door opening (110) into a third position, in which at least one component (118, 120; 400, 402, 404, 406, 408, 410) to be serviced of the sliding door system (100) is accessible via the first door opening (108) and/or the second door opening (110) from outside the housing (104), wherein the component (118, 120; 400, 402, 404, 406, 408, 410) to be serviced is accessible exclusively in the third position,

and/or from which the sliding door (102) is removable from the housing (104) via the first door opening (108) and/or the second door opening (110), and in that in the third position, the first door leaf (114) and the second door leaf (116) are arranged at least partially in a right housing portion (300) of the housing (104) located on the right next to the first door opening (108) and the second door opening (110).

2. The sliding door system (100) according to claim 1,
a distance between the first door leaf (114) and the second door leaf (116) is predetermined by one or more link controls, in each of which a pin arranged on a door leaf (114, 116) engages.

3. The sliding door system (100) according to either claim 1 or claim 2,
wherein the sliding door (102) is mounted in the housing (104) by means of a linear guide device (408, 410) so as to be displaceable beyond the first door opening (108) and the second door opening (110) on both sides;
wherein the linear guide device (408, 410) is arranged at least partially in the right housing portion (300).

4. The sliding door system (100) according to any of the preceding claims,
wherein a gap between an edge portion of the first door opening (108) and an edge portion of the second door opening (110) is covered by at least one cover plate and the cover plate covers the right housing portion (300) of the housing.

5. The sliding door system (100) according to claim 4,
wherein the cover plate is secured to the housing (104) by means of a locking mechanism and is removable from the housing (104) by unlocking the locking mechanism, wherein the locking mechanism is unlockable only when the sliding door (102) is in the first position and/or between the first position and the second position.

6. The sliding door system (100) according to any of the preceding claims,
wherein the first door leaf (114) and the second door leaf (116) have a greater distance from one another in the second position transversely to a displacement axis (112), along which the sliding door (102) is displaceable, than in the first position and/or the third position.

7. The sliding door system (100) according to any of the preceding claims, wherein the at least one component to be serviced (118, 120; 400, 402, 404, 406, 408, 410) is arranged on the sliding door (102).

8. The sliding door system (100) according to any of the preceding claims, further comprising:
an electrical drive assembly (120; 402, 404, 406) for generating the displacement movement, wherein the at least one component to be serviced (118, 120; 400, 402, 404, 406, 408, 410) is a component (402, 404, 406) of the electric drive assembly (120; 402, 404, 406).

9. The sliding door system (100) according to any of the preceding claims, wherein the pivoting mechanism (118) is at least partially accessible via the first door opening (108) and/or the second door opening (110) from outside the housing (104) when the sliding door (102) is in an intermediate position between the first position and the second position.

10. The sliding door system (100) according to any of the preceding claims, wherein the housing (104) further comprises a first door frame (122) which at least partially frames the first door opening (108), wherein the first door leaf (114) is at least partially recessed in the first door frame (122) in the second position; and/or
wherein the housing (104) further comprises a second door frame (124) which at least partially frames the second door opening (110), wherein the second door leaf (116) is at least partially recessed in the second door frame (124) in the second position.

11. The sliding door system (100) according to any of the preceding claims, wherein the pivoting mechanism (118) is designed to convert the displacement movement into the pivoting movement such that, in the second position, an outer surface of the first door leaf (114) together with an outer surface of the housing (104) adjoining the first door opening (108) forms a first flat surface and/or an outer surface of the second door leaf (116) together with an outer surface of the housing (104) adjoining the second door opening (110) forms a second flat surface.

12. A method for servicing a sliding door system (100) according to any of the preceding claims, wherein the method comprises:

deactivating the pivoting mechanism (118) to allow displacement of the sliding door (102) beyond the first door opening (108) and the second door opening (110) to the third position; and

displacing the sliding door (102) beyond the first door opening (108) and the second door opening (110) into the third position to allow access to the at least one component (118, 120; 400, 402, 404, 406, 408, 410) to be serviced via the first door opening (108) and/or the second door opening (110) from outside the housing (104) and/or removing the sliding door (102) from the housing (104) via the first door opening (108) and/or the second door opening (110).

13. The method according to claim 12, further comprising:

removing the sliding door (102) from the housing (104) via the first door opening (108) and/or the second door opening (110) starting from the third position.

14. The method according to claim 13,

wherein the sliding door (102) is displaced from the third position towards the first position and is turned into the first door opening (108) and/or the second door opening (110).

15. The method according to either claim 13 or claim 14, further comprising:

inserting the sliding door (102) into the housing (104) via the first door opening (108) and/or the second door opening (110), wherein the sliding door (102) is brought to the third position;

activating the pivoting mechanism (118).