Claims

1. An electrical socket comprising a 3-pin operated shutter assembly, the shutter assembly comprising:

a live/neutral shutter rotatably moveable between a shuttered position for blocking access to live and neutral contacts in the socket, and an unshuttered position for allowing access to the live and neutral contacts, and

a latch member operable between a latched configuration in which the latch member prevents rotation of the live/neutral shutter from the shuttered to the unshuttered position, and an unlatched configuration which allows rotation of the live/neutral shutter from the shuttered to the unshuttered position,

wherein the latch member is operable from the latched to the unlatched configurations by insertion of the earth pin of a plug into the socket.

2. A socket according to claim 1, wherein the latch member is translatably moveable between the latched and the unlatched configurations.

3. A socket according to claim 1 or claim 2 wherein the latch member comprises a stop member, and when the latch member is in the latched configuration, the stop member is arranged to block rotation of the live/neutral shutter from the shuttered to the unshuttered position.

4. A socket according to claim 3 wherein when the latch member is in the unlatched position, the stop member is remote from the live/neutral shutter so as not to block rotation of the live/neutral shutter from the shuttered to the unshuttered position.

5. A socket according to claim 1 or claim 2 wherein the latch member comprises a first portion, the first portion being shaped such that when it is located adjacent the live/neutral shutter, rotation of the live/neutral shutter is prevented.

6. A socket according to claim 5, wherein the latch member comprises a second portion, the second portion being shaped such that when it is located adjacent the live/neutral shutter, rotation of the live/neutral shutter is enabled.

7. A socket according to claim 6, wherein the latch member comprises an aperture in which the live/neutral shutter is received, the first and second portions of the latch member bounding the aperture.

8. A socket according to any preceding claim, wherein the live/neutral shutter is also moveable in a direction towards the back of the socket.

9. A socket according to claim 8, wherein the live/neutral shutter is only rotatable between the shuttered and unshuttered position once it has been moved towards the back of the socket.

10. A socket according to any preceding claim, wherein the live/neutral shutter includes a spigot containing the axis about which the shutter is rotatable, and two oppositely extending arms for shuttering the live and neutral contacts.

11. A socket according to claim 10 when dependent on claims 8 or 9, wherein the live/neutral shutter is not moveable towards the back of the socket unless substantially equal forces are applied either side of the central spigot.

12. A socket according to any of claims 8 to 11, wherein the live/neutral shutter is moveable in the direction towards the back of the socket when the latch member is in the unlatched configuration, but is not so moveable when the latch member is in the latched configuration.

13. A socket according to claim 12, wherein the latch member comprises a blocking member, the blocking member being arranged, when the latch member is in the latch configuration, to block movement of the live/neutral shutter towards the back of the socket

14. A method of unshuttering an electrical socket, the method comprising the steps of:

providing a live/neutral shutter rotatably moveable between a shuttered position for blocking access to live and neutral contacts in the socket, and an unshuttered position for allowing access to the live and neutral contacts,

providing a latch member operable between a latched configuration in which the latch member prevents rotation of the live/neutral shutter from the shuttered to the unshuttered position, and an unlatched configuration which allows rotation of the live/neutral shutter from the shuttered to the unshuttered position, and

inserting the earth pin of a plug into the socket to operate the latch member between the latched and the unlatched configurations.

15. An electrical socket as described herein with reference to the Figures.

Claims

1. An electrical socket comprising a 3-pin operated shutter assembly, the shutter assembly comprising:

a live/neutral shutter rotatably moveable between a shuttered position for blocking access to live and neutral contacts in the socket, and an unshuttered position for allowing access to the live and neutral contacts, and

a latch member operable between a latched configuration in which the latch member prevents rotation of the live/neutral shutter from the shuttered to the unshuttered position, and an unlatched configuration which allows rotation of the live/neutral shutter from the shuttered to the unshuttered position,

wherein the latch member is operable from the latched to the unlatched configurations by insertion of the earth pin of a plug into the socket, and wherein the latch member is translatably moveable between the latched and the unlatched configurations, and wherein the direction of translation is perpendicular to the direction of insertion of a plug into the socket.

2. A socket according to claim 1 wherein the latch member comprises a stop member, and when the latch member is in the latched configuration, the stop member is arranged to block rotation of the live/neutral shutter from the shuttered to the unshuttered position.

3. A socket according to claim 2 wherein when the latch member is in the unlatched position, the stop member is remote from the live/neutral shutter so as not to block rotation of the live/neutral shutter from the shuttered to the unshuttered position.

4. A socket according to claim 1 wherein the latch member comprises a first portion, the first portion being shaped such that when it is located adjacent the live/neutral shutter, rotation of the live/neutral shutter is prevented.

5. A socket according to claim 4, wherein the latch member comprises a second portion, the second portion being shaped such that when it is located adjacent the live/neutral shutter, rotation of the live/neutral shutter is enabled.

6. A socket according to claim 5, wherein the latch member comprises an aperture in which the live/neutral shutter is received, the first and second portions of the latch member bounding the aperture.

7. A socket according to any preceding claim, wherein the live/neutral shutter is also moveable in a direction towards the back of the socket.

8. A socket according to claim 7, wherein the live/neutral shutter is only rotatable between the shuttered and unshuttered position once it has been moved towards the back of the socket.

9. A socket according to any preceding claim, wherein the live/neutral shutter includes a spigot containing the axis about which the shutter is rotatable, and two oppositely extending arms for shuttering the live and neutral contacts.

10. A socket according to claim 9 when dependent on claims 7 or 8, wherein the live/neutral shutter is not moveable towards the back of the socket unless substantially equal forces are applied either side of the central spigot.

11. A socket according to any of claims 7 to 10, wherein the live/neutral shutter is moveable in the direction towards the back of the socket when the latch member is in the unlatched configuration, but is not so moveable when the latch member is in the latched configuration.

12. A socket according to claim 11, wherein the latch member comprises a blocking member, the blocking member being arranged, when the latch member is in the latch configuration, to block movement of the live/neutral shutter towards the back of the socket

13. A method of unshuttering an electrical socket, the method comprising the steps of:

providing a live/neutral shutter rotatably moveable between a shuttered position for blocking access to live and neutral contacts in the socket, and an unshuttered position for allowing access to the live and neutral contacts,

providing a latch member operable between a latched configuration in which the latch member prevents rotation of the live/neutral shutter from the shuttered to the unshuttered position, and an unlatched configuration which allows rotation of the live/neutral shutter from the shuttered to the unshuttered position, wherein the latch member is translatably moveable between the latched and the unlatched configurations, and wherein the direction of translation is perpendicular to the direction of insertion of a plug into the socket,

and inserting the earth pin of a plug into the socket to operate the latch member between the latched and the unlatched configurations.