However, in situations where such curtains do have edges, the pleats results in openings or gaps through which smoke can pass. In addition as the edges are not held in a fixed position, the whole curtain can be drawn towards a fire as a result of a fire draft, resulting in bowing of the curtain creating a space through which fire and smoke can travel.

The object of the present invention is to provide an improved smoke or fire barrier.

According to the invention there is provided a smoke or fire barrier for closing an opening in a building, the barrier including:-

- a pleated or concertina curtain for closing the opening;
- means arrangeable at a head of the opening for deploying the curtain and for retracting the curtain;
- guide means at sides of the opening for retaining edges of the curtain after deployment and for reducing flow of smoke past the edges of the curtain, the guide means including:
  - a pair of jaws for holding the edges of the deployed curtain, at least one of the jaws being movable towards the other and
  - means for moving the or each movable jaw after deployment of the curtain; and
  - doors for covering the guide means when not in use.

In use, when the curtain is in the retracted position, the jaws are spaced apart to allow passage of the edges of the curtain therebetween. On full deployment of the curtain the means for moving the jaws moves at least one of the jaws towards the other, retaining the curtain between the jaws. This prevents the curtain from being pulled out of the guide means, for example by a fire draft, and reduces flow of smoke around the edges of the curtain.

Preferably the jaws may be in the form of plates arranged parallel to each other.

The edge plates are connected together at their inner edges by diagonal cross members 24. One of the edge plates 18 is secured to the channel 28, while the other one 20 is connected to the first via the cross-members 24. The movable plate 20 is connected to a motor, which when switched on urges the second plate into a position flat against the first plate. When the curtain is deployed this will clamp the curtain between the first and second plates, which will prevent removal of the curtain from the guide, for example as a result of a fire draft, and also prevent the passage of smoke around the edges of the curtain.

When the curtain is withdrawn and held in within the headbox, the channel is open, with the edge plates arranged on either side of the channel 28. On activation of an alarm condition, the curtain is deployed, with the edges of the bottom bar 8 and the curtain 2 passing down the channel. When the bottom bar reaches the floor, or bottom extent of its deployment, it triggers a switch, typically by depressing a plunger, which activates the motor to urge the movable plate 20 against the fixed plate 18, clamping the curtain therebetween. The edge plates close in the manner of a trellis, with the movable plate 20 moving across with respect to the fixed plate 18. However, other movement actions can be envisaged, for example the edge plate could slide directly across the channel on runners. This prevents, or significantly reduces, smoke from passing around the edge of the curtain.

To withdraw the curtain a user has to press a switch 26. This may be after a test or a false alarm. Pressing of the switch causes the motor to open the edge plates to release the curtain. It also causes the curtain motor to withdraw the curtain by rolling the wires on the spindles.

The channel 28 is provided with a door 30, which can close the channel when the curtain is fully withdrawn, concealing the channel. The door 30 is hingedly 31 connected to the fixed plate 18 and when the curtain is fully withdrawn can be closed. The door is held in an open position by a spring 32, or a series of springs along the length of the door. However, the door can also be held closed by a series of electromagnets 34. These may be provided at intervals along the length of the door, or a single magnetic may be provided. The magnets are stronger than the spring, such that while the electromagnets are switched on the door remains

closed. On activation of an alarm condition, power to the electromagnets is switched off, causing the door to open under action of the spring(s) 32. The curtain can then descend with its edge passing down the channel 28.

As discussed above, for withdrawal of the curtain, a user presses a withdrawal switch. In additional to opening the edge plates and withdrawing the curtain, this switch also turns the electromagnets back on. Once the curtain has been fully withdrawn the user can then manually close the door, which will be held in place by the electromagnets.

Thus, in the event of an alarm signal the power to the electromagnets 34 is switched off, which results in opening of the door, and opening the channel. The curtain can then descend. Usually this will be as a result of release of a brake, allowing the weight of the curtain and bottom bar to cause the curtain to fall. However, the descent may be powered. Once the curtain reached the bottom of the channel, it activates a switch which closes the edge plates 18, 20, clamping the edges of the curtain between them.

For withdrawal of the curtain, a user pressed a withdrawal switch, which initially opens the edge plates 18, 20. In addition, the curtain motor is activated with withdraw the curtain, but drawing the wires up onto the spindle. On full withdrawal of the curtain, the brake is then activated to hold the curtain in the withdrawn position. The power to the electromagnets 34 is also turned on. Once the curtain has been withdrawn, the door 30 over the channel 28 can be closed by a user, concealing the channel.

The invention is not intended to be restricted to the details of the above-described embodiment. In a further alternative, the jaws are not plates but at least one edge which clamps the curtain either against the side of a channel forming the side guide, or two edges clamping the curtain therebetween. In some embodiments the jaws may be provided with soft flexible edges for improved