According to an aspect of the present invention, there is provided a surgical introducer for inserting an implant into a human ear, the implant comprising engaging members and being formed from a shape memory material which transforms from a first, substantially planar configuration to a second, horseshoe shaped, preprogrammed configuration, wherein the implant is biased in the second, pre-programmed configuration, the introducer comprising: a handle defining a body and a longitudinal channel in the body to house a retaining guide and receive a deployment member; wherein, the retaining guide is configured to hold the implant in the first, substantially planar configuration; wherein, the deployment member is configured to push the implant from the retaining guide to insert the implant into the ear; and a locking mechanism, characterised in that, the handle further comprises a first locking configuration and a second locking configuration in the body of the handle according to a first position and second position of the deployment member respectively and the locking mechanism comprises a resilient spring formed integrally with the deployment member, wherein at least a portion of the resilient spring is wider than the channel such that when the implant is held by the retaining guide and the deployment member is in the first position, the resilient spring engages with the first locking configuration and when the resilient spring is depressed and the deployment member is move to the second position, the resilient spring engages with the second locking configuration.

During surgery, precise control over deployment of the implant is critical to the resulting adjustment to prominence of an ear. If deployment were to occur inadvertently in the wrong position the patient's ear would not take the desired shape. The implant would then need to be removed and further implant inserted. Provision of a locking mechanism means that deployment can only occur upon the conscious decision of a surgeon to extend the slider into a second position

The retaining means is further defined by the handle.

The handle comprises a body and a slider support member.

The body of the handle comprises a channel to house the slider support member and receive the slider.

The channel comprises a locking formation having a first locking position and a second locking position according to the first position and second position of the slider respectively.

Provision of a locking formation limits longitudinal movement of the slider to between two fixed positions. This provides certainty to a surgeon that the implant is securely retained by the introducer when the slider is in a first position and that the implant will be deployed when the slider is moved to a second position.

The locking mechanism comprises a resilient spring engageable with the locking formation of the handle.

Use of a resilient spring biases the locking mechanism in the locked position. The slider cannot be extended, and the implant deployed, without a conscious decision by the surgeon to overcome the spring in order to extend the slider.

CLAIMS

1. A surgical introducer for inserting an implant into a human ear, the implant comprising engaging members and being formed from a shape memory material which transforms from a first, substantially planar configuration to a second, horseshoe shaped, preprogrammed configuration, wherein the implant is biased in the second, pre-programmed configuration, the introducer comprising: a handle defining a body and a longitudinal channel in the body to house a retaining guide and receive a deployment member; wherein, the retaining guide is configured to hold the implant in the first, substantially planar configuration; wherein, the deployment member is configured to push the implant from the retaining guide to insert the implant into the ear; and a locking mechanism, characterised in that, the handle further comprises a first locking configuration and a second locking configuration in the body of the handle according to a first position and second position of the deployment member respectively and the locking mechanism comprises a resilient spring formed integrally with the deployment member, wherein at least a portion of the resilient spring is wider than the channel such that when the implant is held by the retaining guide and the deployment member is in the first position, the resilient spring engages with the first locking configuration and when the resilient spring is depressed and the deployment member is move to the second position, the resilient spring engages with the second locking configuration.

2. A surgical introducer for inserting an implant into a human ear according to claim 1 wherein the slider further comprises a visual indicator to assist an operator in identifying when the introducer has been inserted a sufficient distance into the ear of a patient.

3. A surgical introducer for inserting an implant into a human ear according to claim 2, wherein the visual indicator is an embossment.

4. A surgical introducer for inserting an implant into a human ear according to any preceding claim, wherein the handle comprises two openings therethrough to each receive a finger of an operator.