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D'UNE VITRE EN VERRE FEUILLETE POURVUE D'UN DISPOSITIF CAPTEUR
(54) Title: LAMINATED GLASS PANE HAVING A SENSOR ASSEMBLY AND METHOD FOR PRODUCING A
LAMINATED GLASS PANE HAVING A SENSOR ASSEMBLY

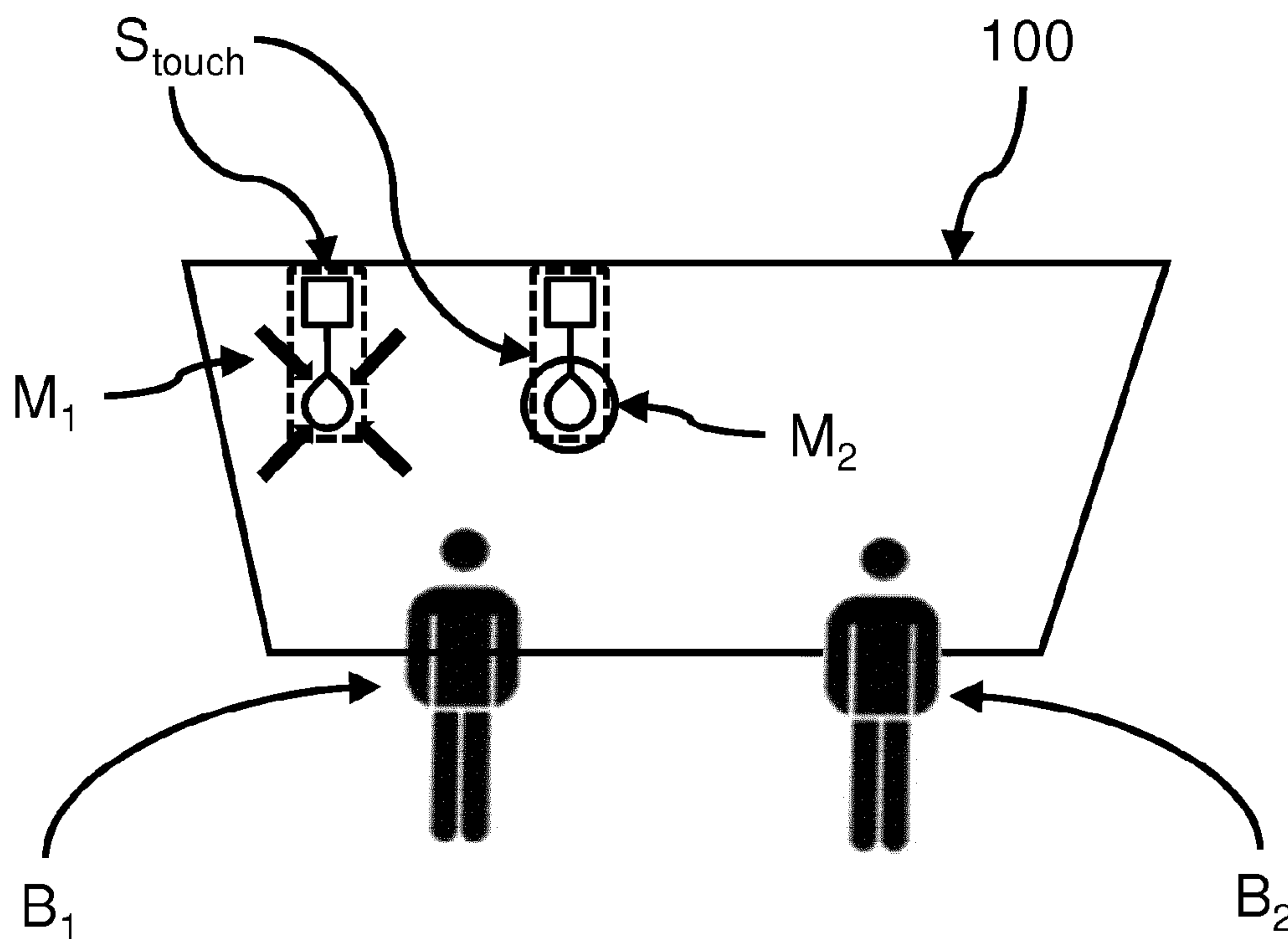


Fig. 1

(57) **Abrégé/Abstract:**

The invention relates to a laminated glass pane (100) having a sensor assembly (S_{touch}), wherein the laminated glass pane has a first glass layer (GS_1) and a second glass layer (GS_2) connected by a combination film (F ; F_1 ; F_2), wherein the sensor assembly

(57) **Abrégé(suite)/Abstract(continued):**

(S_{touch}) is suitable for detecting the approach of a finger, a hologram (H) is arranged at the location of the sensor assembly, said hologram becoming visible to a user when illuminated, and the hologram (H) is arranged between the first glass layer (GS₁) and the second glass layer (GS₂). The invention also relates to a method for producing a laminated glass pane (100) having a sensor assembly (S_{touch}).

Abstract

The invention relates to a laminated glass pane (100) having a sensor assembly (S_{touch}), wherein the laminated glass pane has a first glass layer (GS_1) and a second glass layer (GS_2) joined by a combination film (F ; F_1 , F_2), wherein the sensor assembly (S_{touch}) is suitable for detecting the approach of a finger, wherein a hologram (H) is arranged at the location of the sensor assembly, which hologram becomes visible to a viewer upon illumination, wherein the hologram (H) is arranged between the first glass layer (GS_1) and the second glass layer (GS_2).

The invention also relates to a method for producing a laminated glass pane (100) having a sensor assembly (S_{touch}).

(Fig. 1)

Claims

1. Laminated glass pane (100) having a sensor assembly (S_{touch}), wherein the laminated glass pane has a first glass layer (GS_1) and a second glass layer (GS_2) joined by a combination film ($F; F_1; F_2$), wherein the sensor assembly (S_{touch}) is suitable for detecting the approach of a finger,
 - wherein a hologram (H) is arranged at the location of the sensor assembly, which hologram becomes visible to a viewer upon illumination,
 - wherein the hologram (H) is arranged between the first glass layer (GS_1) and the second glass layer (GS_2).
2. Laminated glass pane (100) according to claim 1, wherein the sensor assembly (S_{touch}) has a capacitive sensor or an optical sensor.
3. Laminated glass pane (100) according to claim 1 or 2, wherein the hologram (H) is applied on the combination film (F).
4. Laminated glass pane (100) according to one of claims 1 through 3, wherein the combination film ($F; F_1, F_2$) contains at least one material selected from the group comprising polybutylene terephthalate (PBT), polycarbonate (PC), polyethylene terephthalate (PET) and polyethylene naphthalate (PEN), polyvinyl chloride (PVC), polyvinyl fluoride (PVF), polyvinyl butyral (PVB), ethylene vinyl acetate (EVA), polyacrylate (PA), polymethyl methacrylate (PMMA), polyurethane (PUR), and/or mixtures and copolymers thereof.
5. Laminated glass pane (100) according to one of claims 1 through 4, wherein at least parts of the sensor assembly (S_{touch}) are applied or introduced as wires on or in the combination film ($F; F_1, F_2$).
6. Laminated glass pane (100) according to one of claims 1 through 5, wherein the sensor assembly (S_{touch}) has at least one planar, transparent, electrically conductive layer (TES), which is delimited by insulating separating lines (U).
7. Laminated glass pane (100) according to one of claims 1 through 6, wherein at least parts of the sensor assembly (S_{touch}) and the hologram (H) are arranged on a common section of the combination film ($F; F_1, F_2$) or a carrier (T) within the laminated glass pane (100).

8. Laminated glass pane (100) according to one of claims 1 through 7, wherein a first view of the hologram (H) appears upon reflective illumination in relation to the viewer.
9. Laminated glass pane (100) according to one of claims 1 through 8, wherein a second view of the hologram (H) appears upon transmissive illumination in relation to the viewer.
10. Laminated glass pane arrangement, having a laminated glass pane (100) according to one of claims 1 through 9 and an illumination source, which controllably illuminates the hologram (H) such that it appears to the user.
11. Use of a laminated glass pane (100) according to one of claims 1 through 10 in vehicles or buildings or as an information display.
12. Method for producing a laminated glass pane (100), having the steps:
 - obtaining a hologram (H),
 - introducing the hologram (H) on a combination film (F; F₁, F₂) of the laminated glass pane, wherein the step of the introduction is selected from laminating, gluing, on the combination film (F; F₁, F₂),
 - completing the laminated glass pane (1).
13. Method for producing a laminated glass pane (100) according to claim 12, wherein the hologram is at least partially transparent.

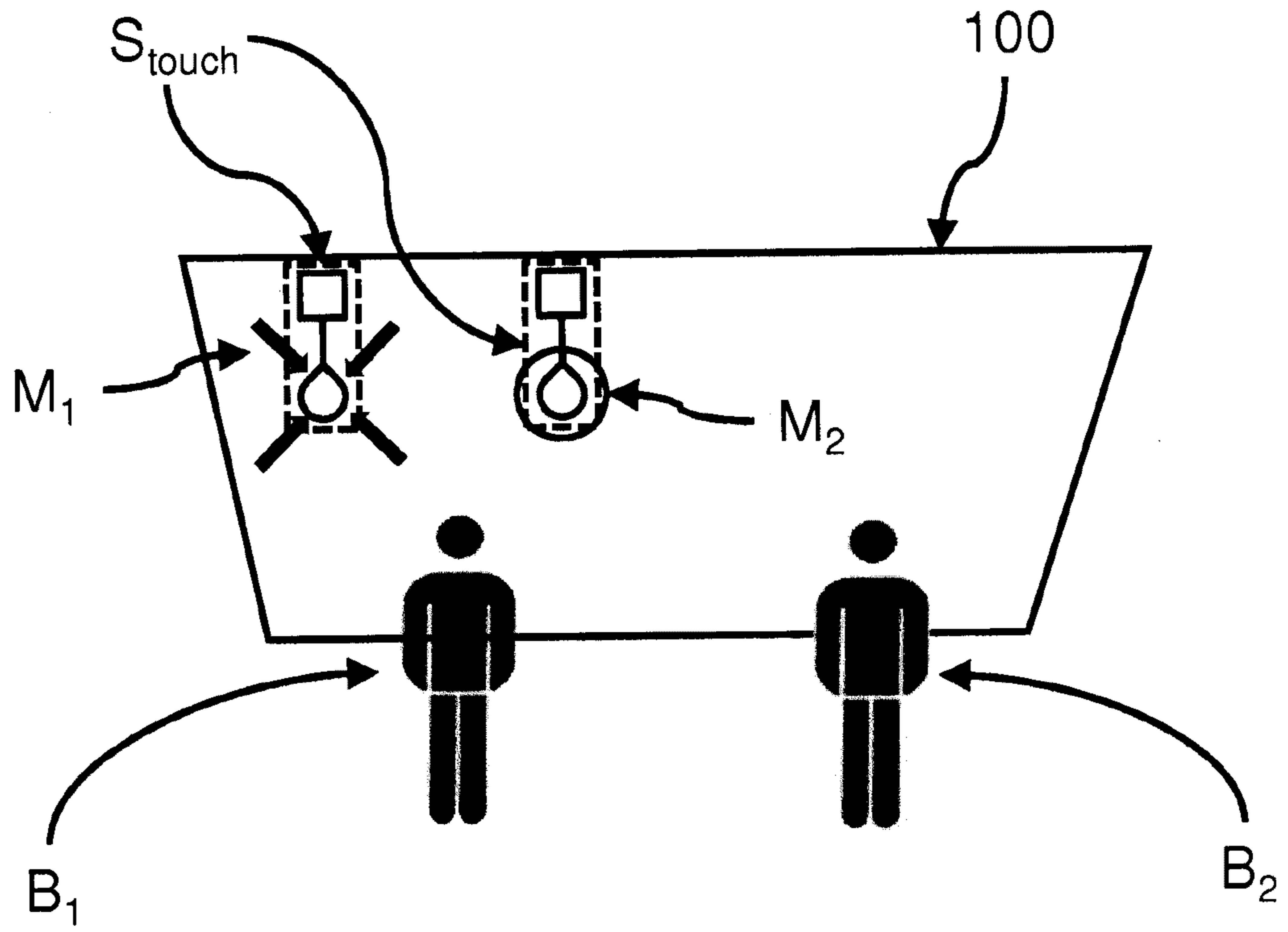


Fig. 1

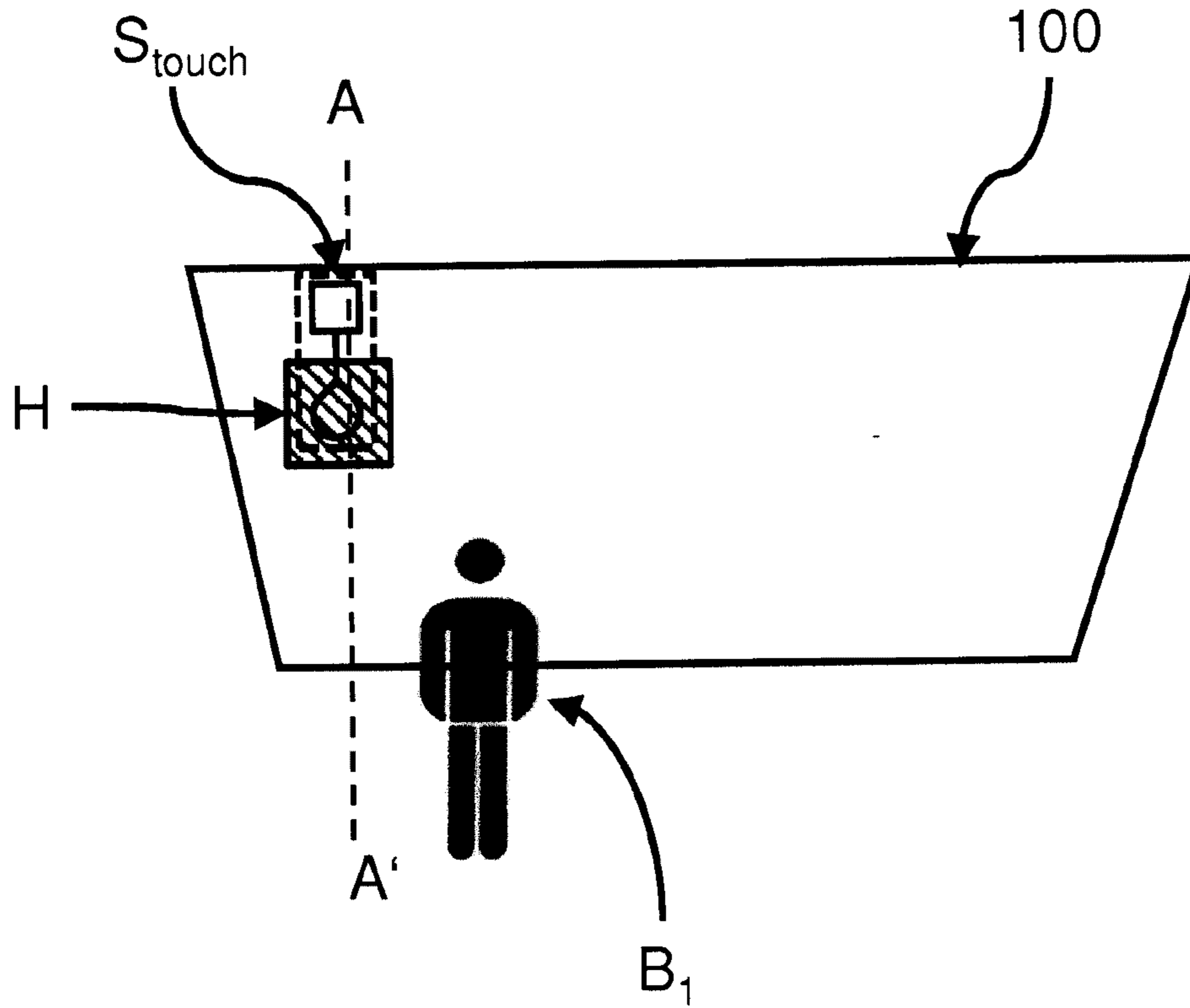


Fig. 2

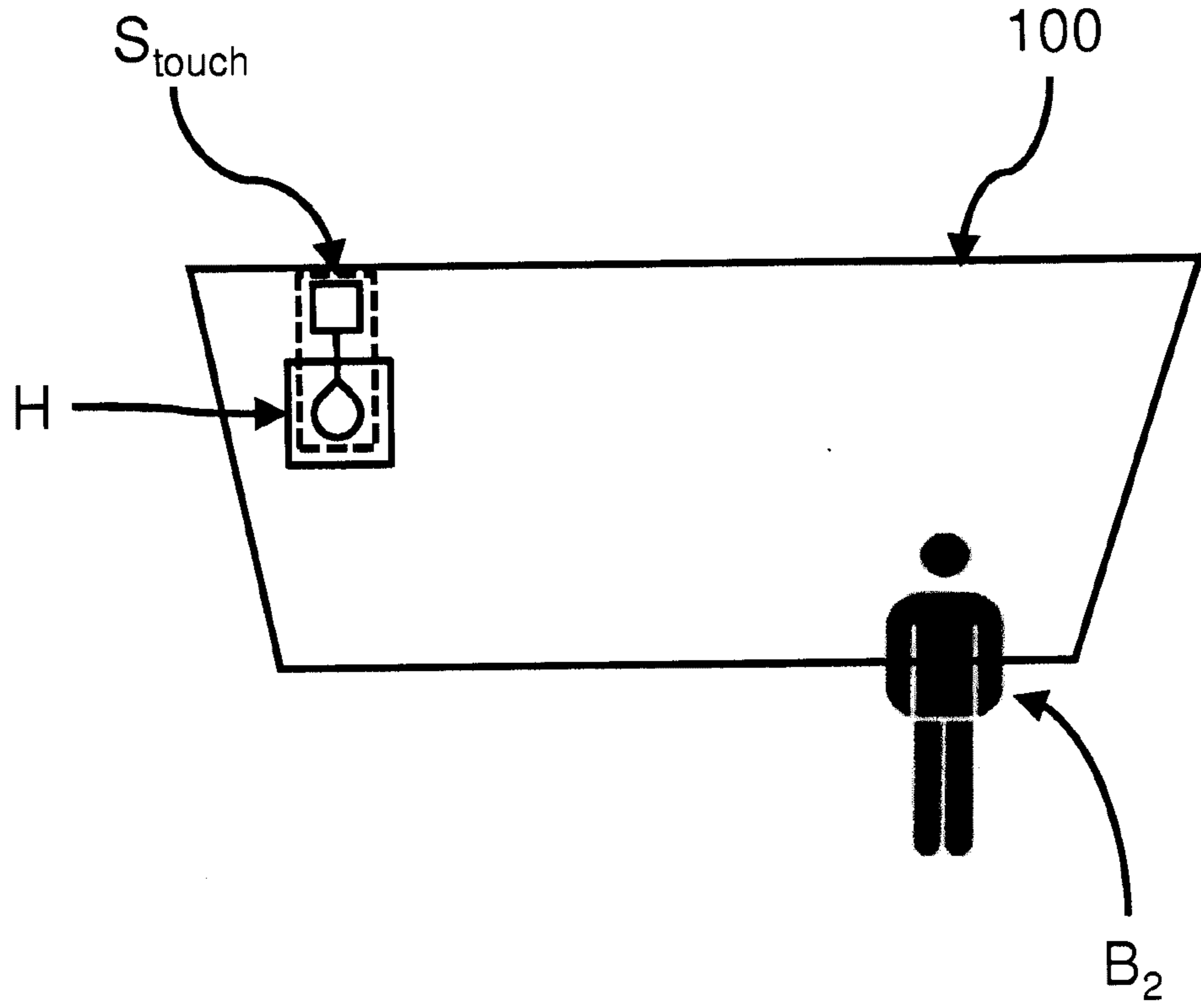


Fig. 3

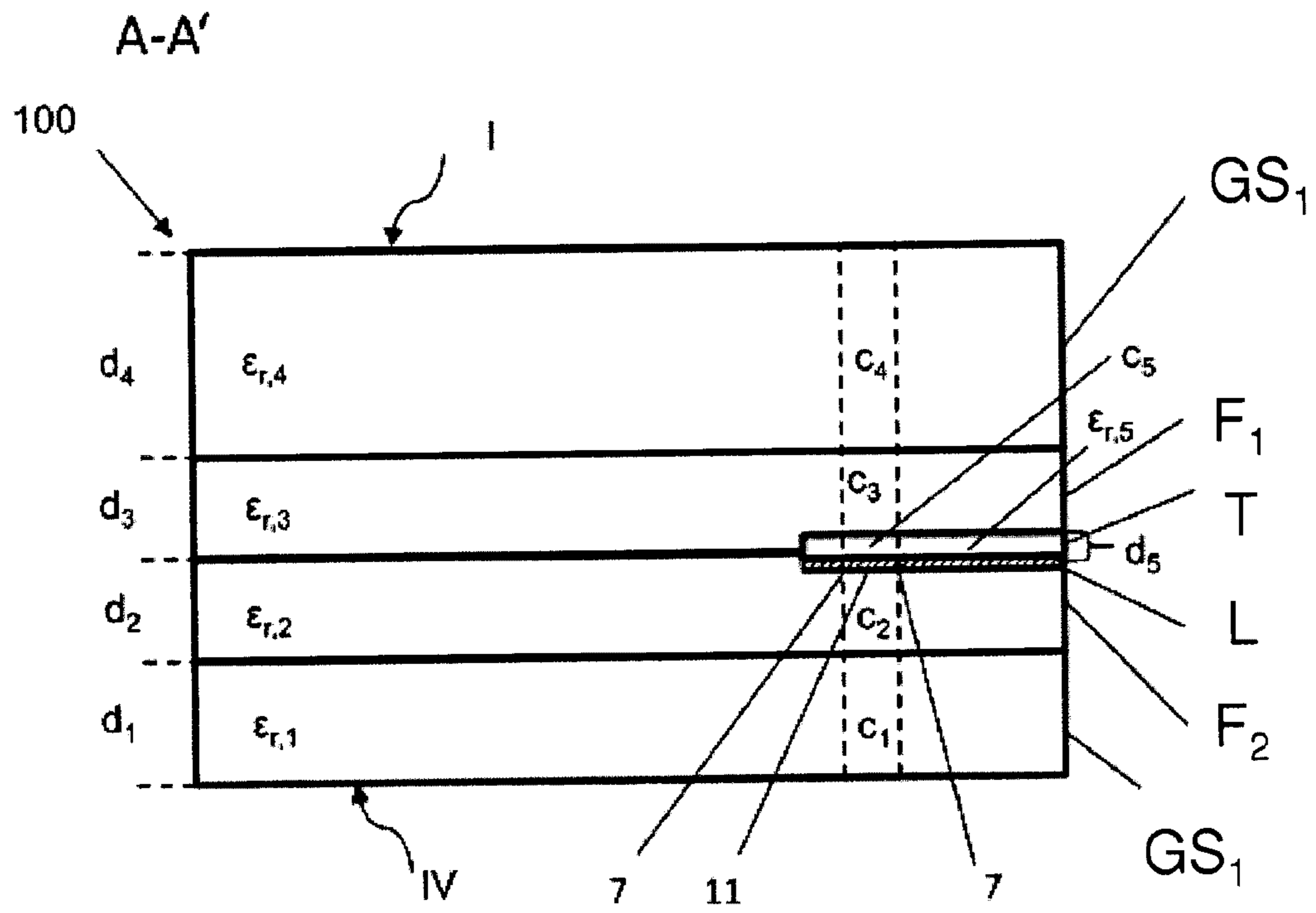


Fig. 4

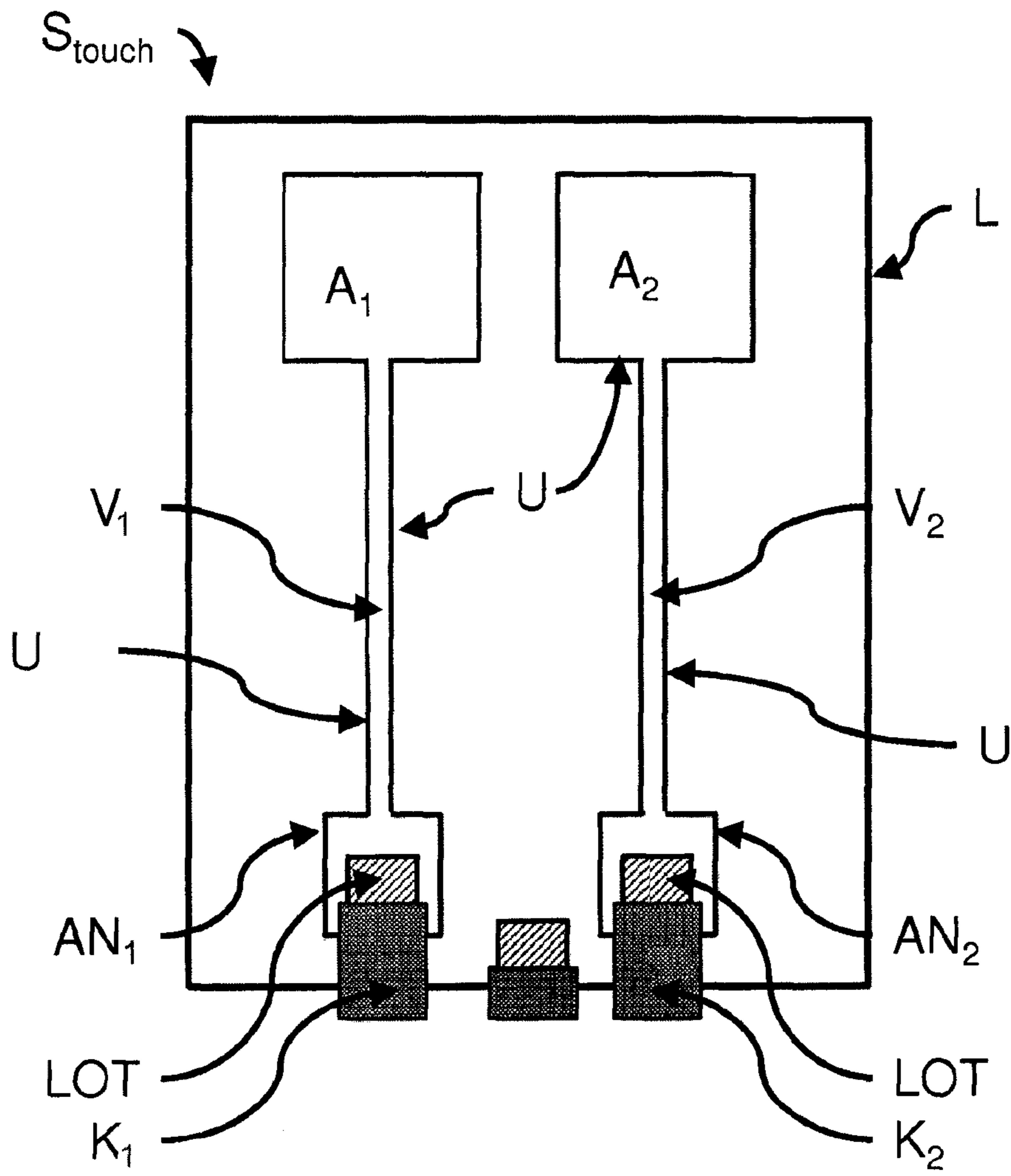


Fig. 5

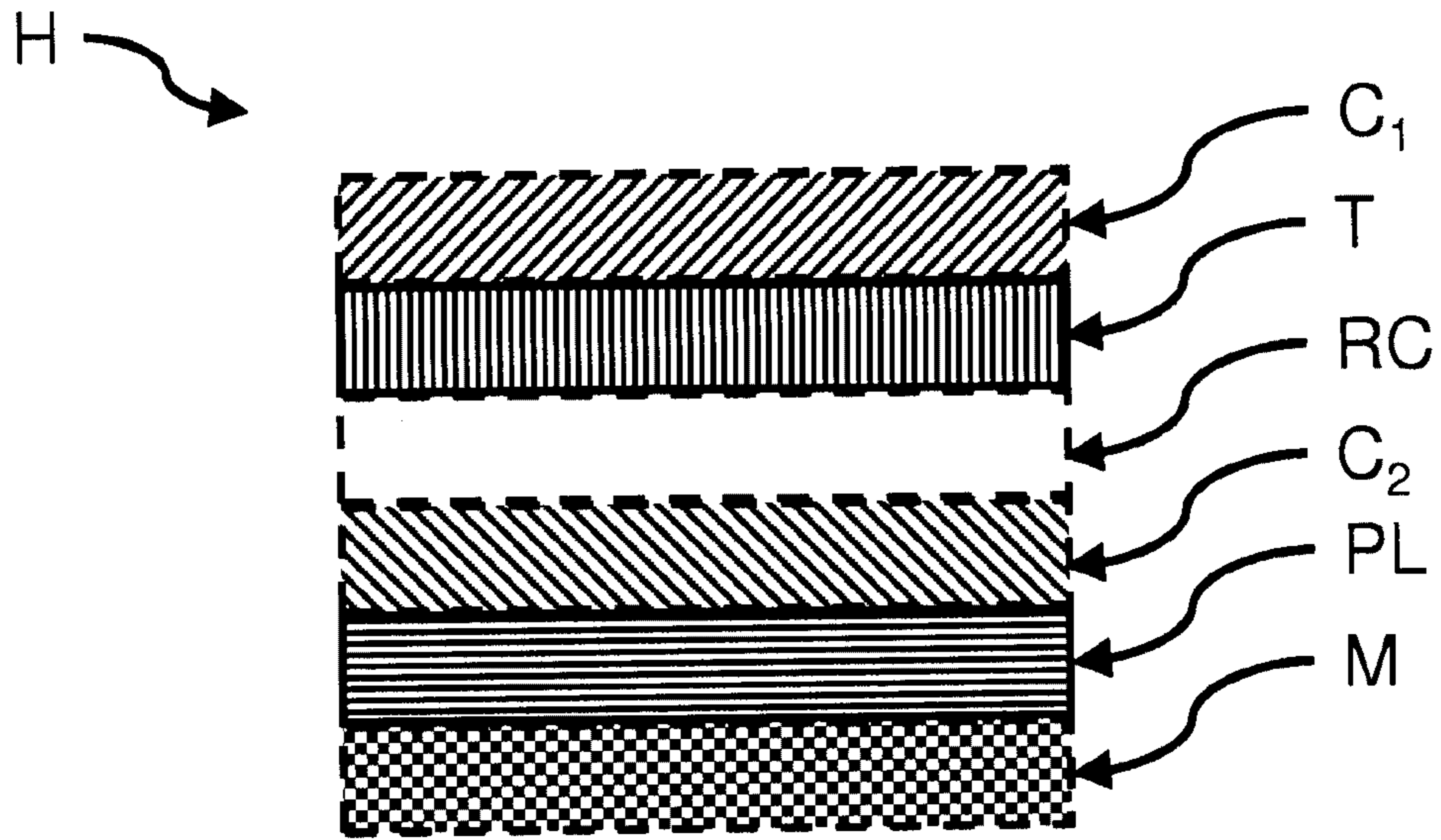


Fig. 6

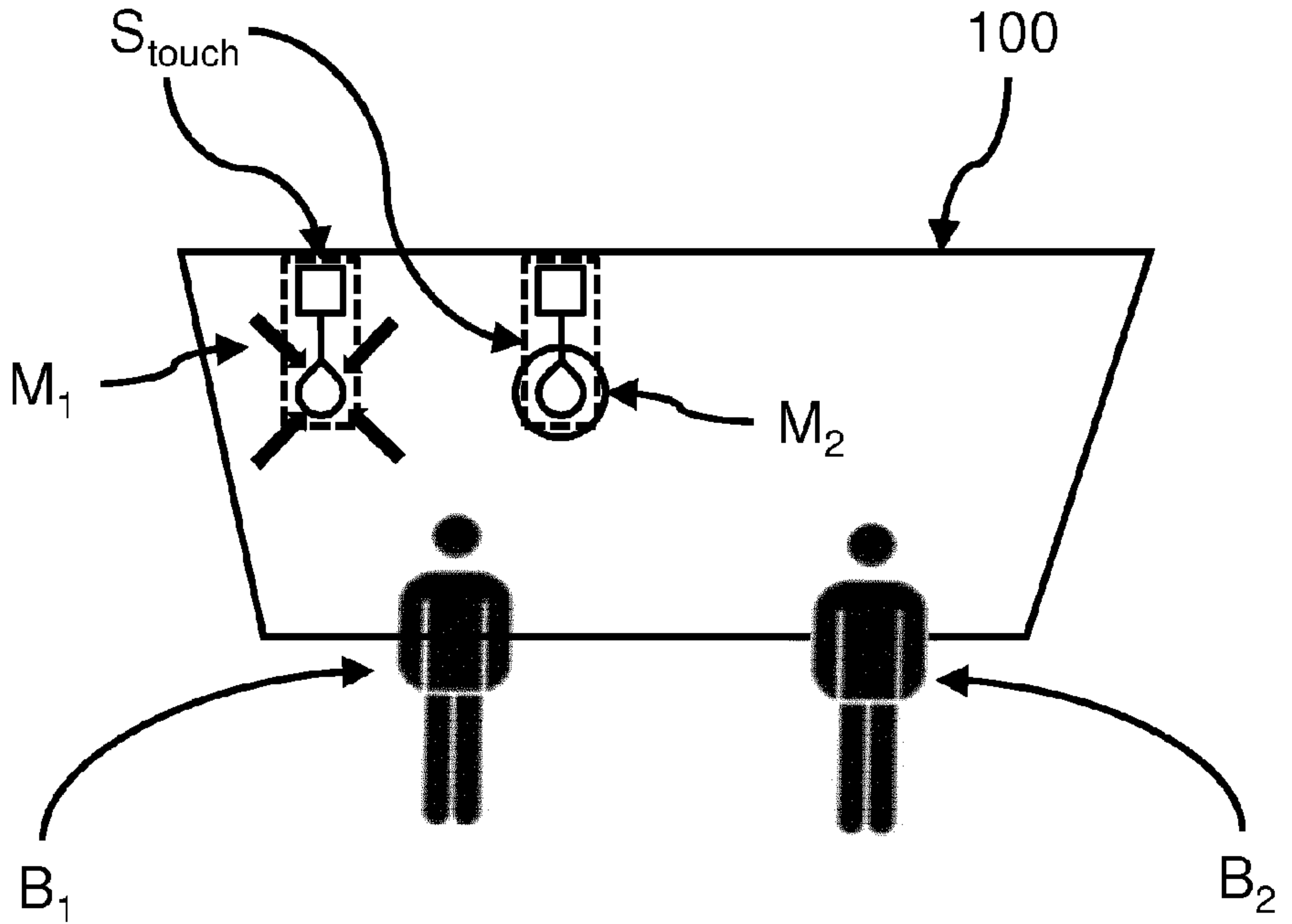


Fig. 1