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## PRESSURE SIGNAL IMPROVING COMPONENT

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## PRESSURE SIGNAL IMPROVING COMPONENT

### Technical task:

The object of the technical innovation is to provide a component which is intended to amplify the signal of the impact, in particular in places where sufficient signal generation does not take place.

### Initial situation:

In vehicles in which pressure-dependent sensors by means of a (pressure) hose to detect the impact of an object (vehicle / pedestrian / animal / or other), can be used to amplify weak pressure signals according to the technical innovation additionally in the surrounding component (see sketch) Pressure booster part are used.

### Solution:

An already known component is a pressure-enhancing component in the direction of the acting force in front of the pressure hose, i. on the side facing the impact (force introduction) (see sketch option A).

Option B (see sketch) is a pressure-enhancing component made of a stronger or stiffer material (rubber, plastic, metal, or other suitable materials) than the pressure hose itself. This is located in the direction of the applied force behind the pressure hose. Here, the case is described that the pressure hose for positioning in a surrounding other material, e.g. a shock absorber (foam, plastic molding, or other holder) in a corresponding, technically necessary position on a vehicle near the outer surface, e.g. is fixed directly under the bumper cover and is held at a certain greater or lesser distance to a support surface (thrust bearing of the pressure hose).

The shape of the pressure enhancing member may take any geometric 2 or 3 dimensional shape according to the functional requirements and may be directly incorporated or mounted in the mounting member (e.g., retainer or foam) that holds and positions the pressure hose on the vehicle. The pressure-boosting component (in the direction of force behind the pressure hose) is intended to intensify the pressure signal at the points at which the surrounding contour (design-dependent or function-dependent projections / offsets in the outer skin) permits no or insufficient signal generation or if the supporting abutment is replaced by molding. or material or processing or manufacturing discontinuity does not produce sufficient signal strength.

### Advantages:

- The amplification of the pressure signal also makes the points more sensitive in the event of an impact, at which initially no sufficient signal generation takes place.

### Possible application:

- All vehicles with pressure-dependent sensors.

