Extract

Met the invention is intended for persons who voluntarily or involuntarily for an approaching train on the train tracks are located, by means of an airbag system on the front of a train to the right or left of the track werpen.Hierdoor in the most cases occur that individuals have reason to be seriously maimed and often no longer recognizable. For family, it is often not possible to personally say goodbye. Those directly involved surrounding the accident as conductor, engineer, professionals such an accident is a traumatic experience because of the mutilated state of the victim

Airbag system for people who come by train from the track shed.

The invention relates to an airbag system on the front of a train that persons who voluntarily or involuntarily on the train tracks are located, to the right or left of the track casts. In this way, people in most cases no longer run over by a train.
By using this airbag system can prevent people seriously maimed are, often no longer recognizable making a personal farewell to the victim's family is not possible. Those directly involved surrounding the accident as conductor, driver and helpers such an accident is a traumatic experience because of the mutilated state of the victim.
For persons who are voluntarily or involuntarily on the rails are removing uses an infrared sensor and ultrasonic systems. Two systems for precise operation The infrared sensor system is established to identify individuals, the ultrasonic sensor system to determine the exact distance between person and train. Sensing by the sensors of the distance between person and train depends on how fast the train goes. The speed is low then the short distance to the person that the airbags are activated at high speed and distance to the person that the larger airbags are activated. The airbag system includes four airbags angled inside and around it angled out four more airbags. In operation, first the airbag is filled in, touches the person fills the air than the larger outer bag and immediately throws the person to the right or left of the track. When the train stopped the system switches itself off.
The operator can, for whatever reason, turn off the system by means of a button.
The invention will be put in greater detail by means of figures that the operation and performance capabilities of the invention display.
Figure 1 shows a top view back from the front of a train with a device consisting of infrared sensors 2 which when using the beam 3 is a living object, four signals then with the ultrasonic sensor 2a and the radius of this 3a exact distance to the object scanning and depending on the speed of the train determines when the air bag in an opening. If the object is 4 living inside a bag fills directly affects the outer bag 1a and the four living object to the right or left of the rails thrown.
Figure 2 shows a side view of the front of a train showing visible airbag sensors 1 and 1a and 2a and 2 height position.
5 posted with button on the dashboard allows the operator to turn off the system.

Conclusions

1. Device to the front of a train to individuals who voluntarily or involuntarily on a train track for an approaching train there, right or left of the rails to throw through an infrared sensor that detects whether on the track is a living object and after that this signal with the ultrasonic sensor, the exact distance of the object determines living and depending on the driven speed of the train inside the bag into production. By the living object inside the bag then hit the airbag is filled out and throws the tilt of the airbags the living object to the right or left of the track.
2. Device according to claim 1 that the system on or off automatically when driving or stop the train or the driver of this one button to turn the system off.

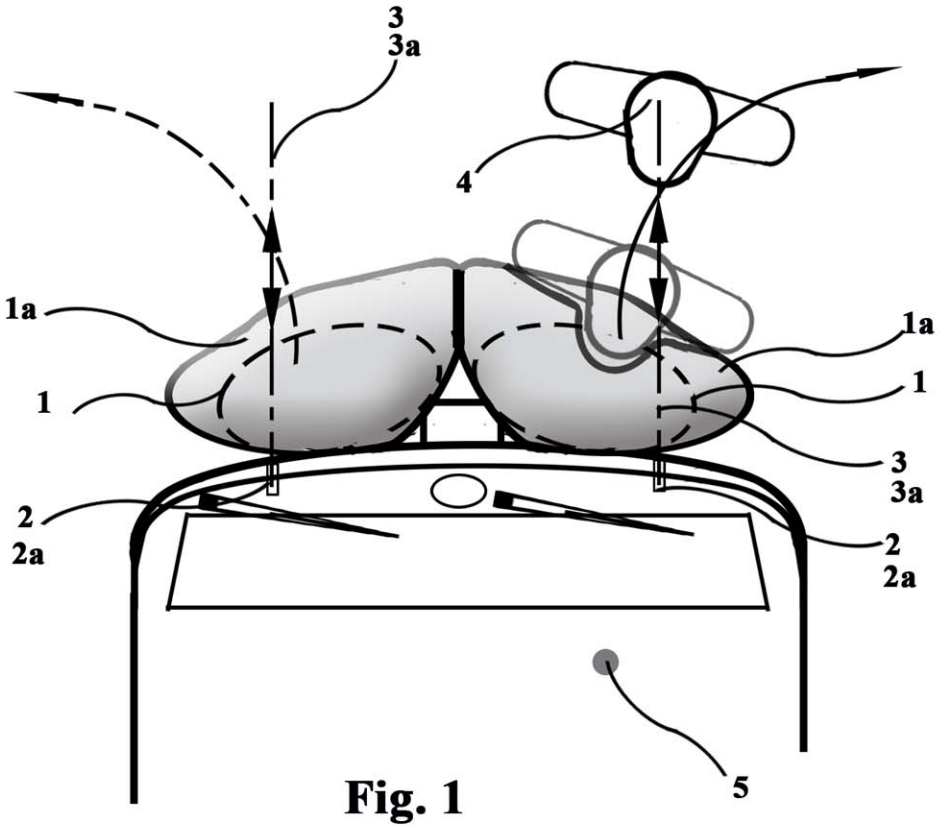

Fig. 1

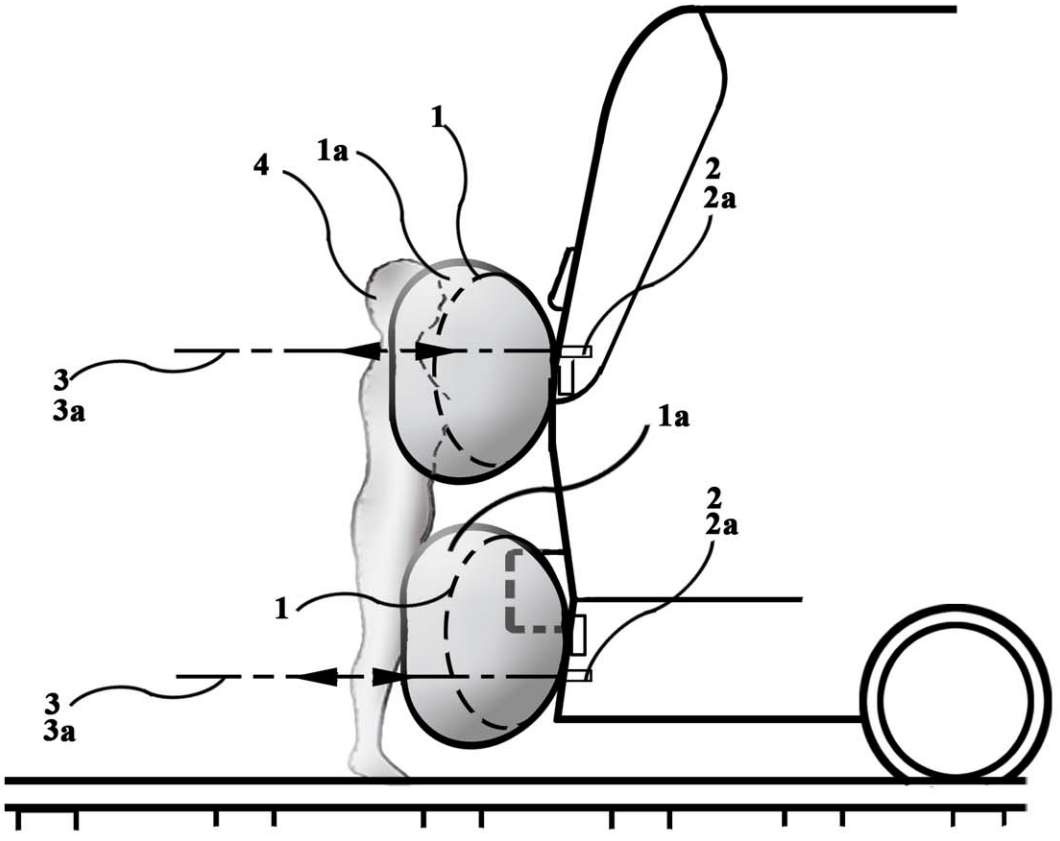

Fig. 2