

Protection system for the occupant of a saddle-type vehicle, such as a motorcycle



NEW
MOBILITY



Airbag Exoskeleton Safety Belts Protection system
Motorcycle Saddle Scooter ECU

Innovations/advantages

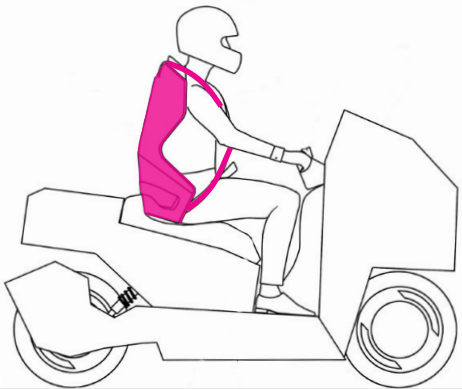
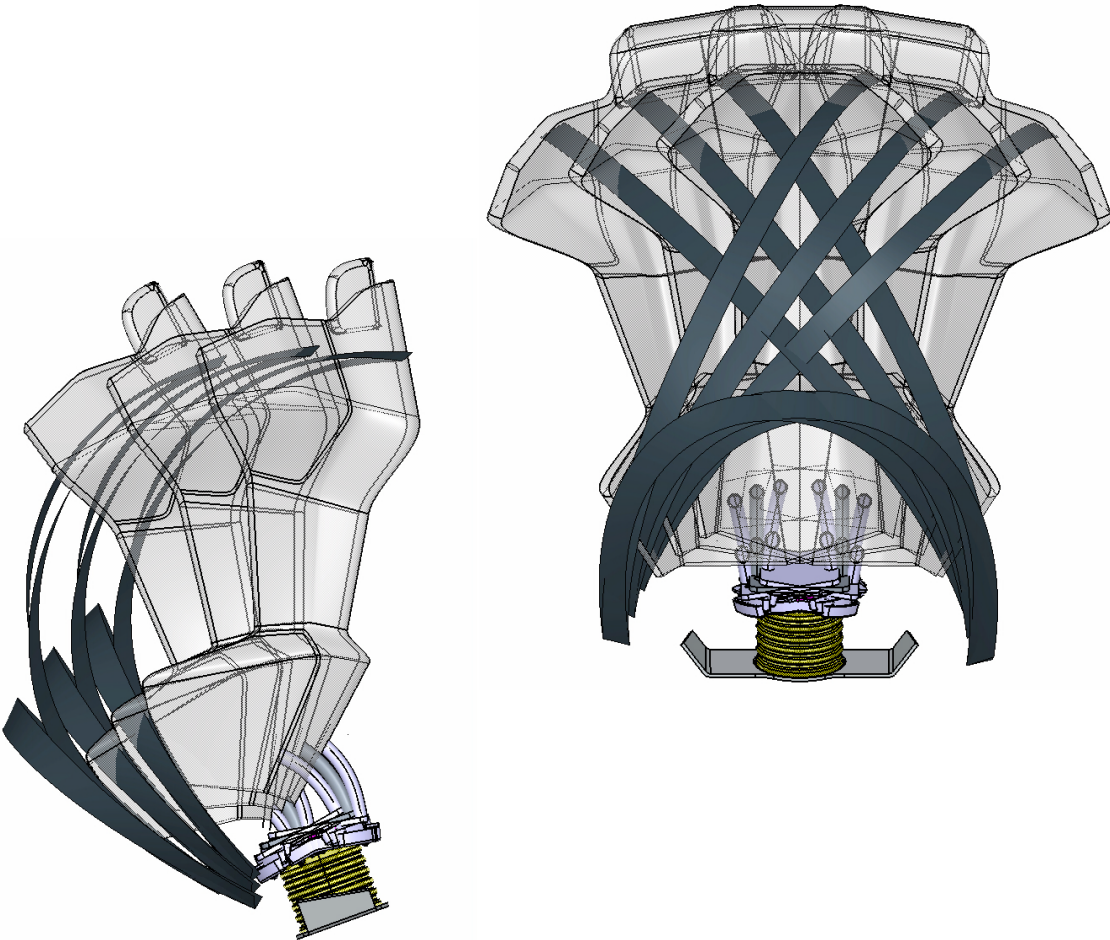
Automatic release of the backrest structure from the frame when certain conditions occur in the event of an accident;
Encoding of sensor information, in particular accelerometers, for recognition of the type of impact (front, side);
The shell element is covered with a soft material to guarantee a certain level of comfort to the rider while driving, as well as cushioning the impact in the event of an accident involving the impact of the shell element against the ground or an obstacle;
Four-point safety belts with central fastening device and pretensioner that operates in the event of an impact.

Application field

Vehicles engineering

Product insight

Italdesign has patented a motorcycle occupant protection system for protection in the event of a collision. Comprising a rigid non-deformable shell covered with a soft material, and safety belts, the device determines, using sensors, whether to keep the backrest structure attached to the vehicle chassis, together with the occupant, or to release it, according to the type of accident. The system is designed for any two, three and four-wheeled saddle-type vehicle and is much less bulky than a superstructure fixed to the vehicle chassis. In addition, it does not penalize the dynamic behaviour of the vehicle.



Patent Information

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National patent filings

