

A method and an apparatus for checking and/or configuring the arrangement of the physical elements of a vehicle

Ergonomics



UX/HMI



SOFTWARE

KEYWORDS

- ▶ Interior Layout
- ▶ VR Software & Technologies
- ▶ H-Point
- ▶ Clinic test
- ▶ Merged Reality
- ▶ Tracking System
- ▶ Virtual Validation
- ▶ HMI/UX
- ▶ Head Mounted Display
- ▶ Benchmark
- ▶ Seating buck
- ▶ Haptic Feedback

Innovations/advantages

Reduced development time & investment;
Product and benchmark definition;
Different sitting positions and layouts;
Possibility to track items and body position with millimeter accuracy;
Immersive & realistic environment and user experience;
Virtual ergonomic checks and clinic;
Augmented convergence process;
Just in time design comparison;
Faster time to market;
Continuous tool development and integration to interact with the virtual scene;
Real time broadcasting & co-working through session sharing.

Application field

Vehicles engineering
Design centre
Concept Lab



Product insight

- *Italdesign has patented a method and equipment that allow, through interaction with an immersive virtual environment, simulation of the real conditions of use and the arrangement of the physical elements of a passenger compartment, including for testing purposes. The user can be connected using multiple wearable sensors (Motion Capture), enabling analysis of the User Experience (UX) and the experience of using graphical interfaces (HMI). Physical elements such as seats, steering wheel, foot pedals, roof, doors, and armrests, can be moved and positioned in line with pre-programmed reference points according to type-approval criteria.*

Patent Information

Priority Date – 30 September 2019

Application Number
PCT/IB2020/059089

Publication Number
WO 2021/064563 A1

IPR Dossier n.A21



National patent filings

Contact:

italdesigntoipr@italdesign.it