

Categorie Premio	Accessibilità	Sostenibilità	Qualità della vita

Product Name	Service: Personal health assistant; Main product: Bodyreflector
Designer	Rochus, Jacob
Company Name	Ident Technolav
Entire Address	Adress Argelsrieder Feld 5.....ZIP Code 82234..... City Wessling..... State/Province Bavaria..... Country Germany
Telephone	+49 (8153) 88 96 90
E-mail	wolfgang.richter@ident-technology.com
Website	http://www.ident-technology.com
Italian Dealer	
Entire Address	Adress.....ZIP Code..... City..... State/Province Country
Telephone	
E-mail	
Website	
Referring contact for the Award	Rochus, Jacob
Company	Ident Technolgy
Telephone	+49 179 6904000
E-mail	Rochus.Jacob@Gogglemail.com
Referring contact for possible exposition in April	
Company	
Telephone	
E-mail	

Description of innovation social values

- product category
- formal and functional features
- problems solved by innovation
- user
- field of application

Award category: Quality of Life

Product category: Consumer healthcare, monitoring, prevention, home therapy

The main innovation of this project is the "Body Reflector" a health state monitoring plaster which is designed to work 24/7 in a patient everyday life. The plaster is designed and prototyped by Ident Technolgy. Working cloth with the medical industrie, Ident Technolgy also created an possible future service scenario with the "Body Reflector" embedded. This should communicate in a more holistic way the potential impact such an product could have on the healthcare system and the patient treatment. There are several problems that global western health system will have to face. Due to the increase in the older generation, the demographic trend is changing in many countrys and will create a big challenge for the health service and health insurance. The effects of these developments are a major concern to society. All processes must be analysed and optimised under the aspects: cost reduction, service quality and customer orientation. 80% of the total expenditure of the german health service is on chronic diseases and long-term illnesses. Every second death is due to cardiovascular disease. Cardiovascular diseases cause annual costs of Euro 35,4 billion in Germany. This is mainly due to the wrong diet, not enough exercise and a late intervention of medical treatment. The task was to design a device that you could implemented in a patient's daily life with as few restrictions as possible. It should minimize routine inspections at the doctor to a minimum, work for ill people as well for those who are using it for prevention. Prevention is on of the big future opportunities we see and would like to push forward with our design.

Description of technical features

- operations
- technology

The "Body Reflector" checks to due three sensors vital functions like ECG, EEG, pulse, blood pressure, temperature or respiration. The plaster is designed to work in several operations: Everyday monitoring, the plaster has to work with a GPS enabled cellphone like technology to guarantee supervision all the time. The plaster by himself could be used in nursing homes, hospitals or disaster areas with a lot of injured people like a traffic accidents. Heart of the plaster is the "Skinplex" Technolgy, invented and patend by Ident Technolgy and a thermoelectric generator which provide electricity thru body heat. Skinplex technolgy uses the conductivity of the human body to send digital data files over the skin. The signal transmission via skin is definitely harmless. The current running through the body is far below the harmful value of 0.5 mA and is only some microamperes strong. The Skinplex technology is cheaper than for example Rfid or Bluetooth and it needs just a small amount of energy. It causes no radiation so it would not disturb other electric devices in hospitals.

Dimensions

Body Reflector (plaster): 60mm long, 54mm wide, 4mm height.

Materials

Liquid gel pad that covers the technology inside(Skinplex chip, three electrodes and thermoelectric generator). The gel pad is coated by an hydro active adhesive foil that is breathable and water proofed as well.

Certifications

- Bodyreflector
- **International Design Excellence AWARD 07**, bronze winner.
- Skinplex Technolgy
- **2006 Innovation Award Mid Tier**, at Cebit 2006
- **2005 Innovation Award of the German Economy**, Finalist

Benefits for environment

The hospital cost of a patient in critical conditions are around \$1500 per day in Germany. This means the usage of a lot of energy and materials. The personal health assistant could reduce these costs and the use of recources by every day it saves the patient from not beeing in the hospital. The plaster is designed to be really duarble and last for a long time.

Benefits for human being

The plaster can be placed really flexible on the body, see different sleeping habits. Once it's in position the patient don't need to care about it for two weeks, which is a huge benefit for people with dementia. The system works without any cables which helps high-risk patients to become more mobile while still under medical supervision. It can reduce the time how long a patient has to stay in a hospital. The time reduction spent on not staying at a hospital saves a lot of money for the patients and the health insurances. The unobtrusive design of the system frees patients to go about their daily life without worrying about their health.