

In the Spotlight

■ The BEAR robot carries injured soldiers at battlefield

The **B**attlefield **E**xtraction **A**ssist **R**obot (**BEAR**) will help carry injured soldiers away from the battlefield. It has teddy bear-style head, and computer controlled motors allow to maintain balance – to stand and carry loads upright on its ankles, knees or hips for nearly an hour. BEAR has not only friendly appearance, but it is also highly manoeuvrable. The robot can handle gently with wounded soldiers; it can lift 135 kg in a single smooth movement. BEAR robot in home version can be a nursing and healthcare assistant.

BEAR Robot is developed by Vecna Robotics company for the US Army. It is expected to be ready for testing within five years.



Source: www.vecna.com/robotics/index.shtml

■ Transmitter

Marin Soljagic from MIT invented a wireless way of transmission of electrical energy. A prototype transmitter supplies a bulb from 2-meters distance. The transmitter works like transformer; the energy flows through from one circuit to another, although turns of winding are not in contact. Things or peoples within the emission zone do not disturb of the transmission. The prototype's efficiency is 40%.



Source: <http://www.mit.edu/~soljagic/>

■ Mobile phone closer nature

After 7 years of research, the Hi-Tech Wealth has invented solar panel (84 x 47.6 x 0.8 mm) integrated mobile phone. An hour in sunlight is sufficient to 40-minutes talk. Chinese company maintains that telephone can be loaded by whichever light source. It does not need loader and socket-contacts. It is expected to be in sale within this year.



Source: www.htwchina.com

■ EXPERT robot

The construction of the EXPERT robot joins small mobile base with long-range manipulator and big weighing capacity together. Expert can do all tasks inside the means of conveyance (esp. planes), as well as in small and compact accommodations. It also moves over stairs, roadblocks, and romud, sand, deep puddles. Expert weights 180 kg, has 6 cameras, and can be controlled remotely or by cable.



Source: www.antiterrorism.eu