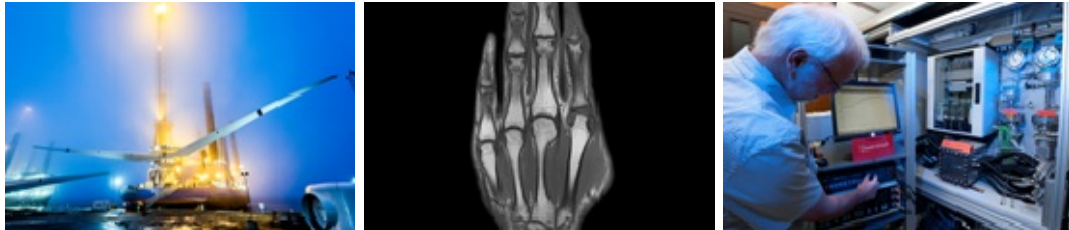


## Fact sheet – Research and Development at Siemens

**Innovations have been a key factor in Siemens' success for 165 years. Today, the company has about 29,500 researchers and developers in 33 countries worldwide, working to create new energy, industry, infrastructure and healthcare solutions. To further boost its power of innovation, Siemens also collaborates with universities, research institutes and industrial partners around the world in more than 1,000 new research projects every year.**



### Powerhouse of innovation

- In fiscal 2012, Siemens invested €4.24 billion in research and development (R&D). Software development accounted for some 40 percent of the company's total R&D budget.
- Siemens conducts R&D activities at about 190 locations worldwide and – as part of the Center of Knowledge Interchange Program – cooperates in strategic projects with a number of leading research institutes, including Munich Technical University (Germany), Aachen Technical University (Germany), Berlin Technical University (Germany), Massachusetts Institute of Technology (U.S.), the University of California at Berkeley (U.S.), Tongji University (China) and Tsinghua University (China).
- Around 17,500 employees are software developers, making the company one of the world's largest software houses.
- Siemens regularly honors its best R&D experts: as Inventors of the Year for outstanding patents and as Top Innovators for successfully turning promising technologies into marketable products.
- Siemens' latest innovations include the longest rotor blade currently in operation worldwide: a 75-meter rotor blade that was installed in a six-megawatt test turbine in Østerild, Denmark, in the summer of 2012. Siemens engineers have also developed innovative electrolyzers that use electricity to split water into hydrogen and oxygen very rapidly and efficiently. A key component of future energy storage systems, this process makes it possible, for example, to store as hydrogen the excess electrical energy generated by wind turbines. New systems introduced by Siemens Healthcare under its Accessible Innovations Program include the Magnetom Spectra, a 3-tesla magnetic resonance imaging scanner that offers excellent image quality, high process efficiency and low cost of ownership.

## Fact sheet – Research and Development at Siemens

### Patents and invention reports

- Industrial property rights – above all patents and trademarks – guarantee the reliable protection of R&D investments. Such protection is indispensable for generating business success from valuable innovations.
- Siemens' patent portfolio comprises some 57,300 granted patents worldwide – seven percent more than at the end of fiscal 2011. About 20,200 of these patents are so-called green patents – that is, property rights connected with the Siemens Environmental Portfolio, which encompasses energy-efficient products and solutions, renewable energies and environmental technologies.
- In fiscal 2012, the number of invention reports at Siemens increased some five percent year-over-year to about 8,900 – an average of 40 on each of the year's 220 workdays and an outstanding testimony to the company's power of innovation.
- The number of invention reports per R&D employee has roughly doubled since 2001.
- The number of patent first filings increased seven percent year-over-year to about 4,600 – or nearly 21 per workday.