

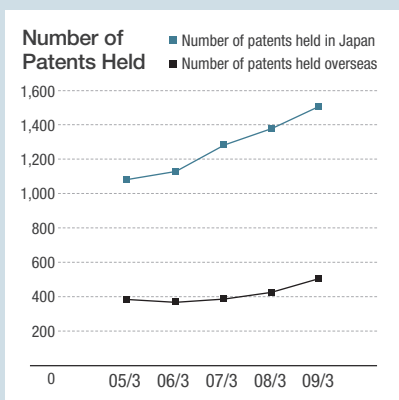
Promotion of Pioneering R&D Based on Technologies for Conveying Energy and Information

Pioneering R&D

The Hitachi Cable Group is focusing on research and development that will enable it to respond appropriately to the needs of customers based on its core technologies for conveying energy and information. Our R&D structure is made up of the Corporate Advanced Technology Group (the Research & Development Laboratory) and the R&D departments of the individual business groups. They coordinate their work to speedily develop technologies and products ahead of the times, analyze trends in technology and domestic and overseas markets and organize R&D staff training programs.

Strategic utilization of intellectual property

Intellectual property derived from R&D and product development, such as patents, etc., constitutes an important strategic management resource. We will continue to enhance both the number and quality of our patents. Acquiring patents and utilizing them effectively is the best way to hone our competitive edge.



R&D achievements in the year ended March 31, 2009

R&D activities and achievements by business segment in the year ended March 31, 2009 are as follows. Total R&D expenses were ¥11,078 million.

Wires and Cables

This segment engages in R&D of transmission and connection technologies related to industrial wires and cables and electronic equipment. R&D expenses in this segment were ¥1,500 million.

<Achievements>

- Establishment of a mass production system for twisted wires for toroidal magnetic field (TF) coils for the ITER (International Thermonuclear Experimental Reactor) project
- Development of super-fine conductors for medical applications

Information and Telecommunications Networking

R&D themes in this segment include fiber optic cables and other information and telecommunications-related cables and sensors, various devices and components essential for the construction of Internet and mobile phone systems, networking equipment and mobile base station antennas. R&D expenses in this segment were ¥5,286 million.

<Achievements>

- Development of line cards supporting Ethernet OAM (international standards for operation, administration and maintenance) for multi-slot media converters
- Development of Apresia 16000 series
- Commercialization of box-type Ethernet switch supporting layer 2 and layer 3 standards (Apresia 3400 series)

Sophisticated Materials

This segment focuses R&D on the three areas given below. R&D expenses in this segment were ¥4,292 million.

<Achievements>

Semiconductor packaging materials and electronic components

- Mass production of chip on film (COF) tapes with wiring lead pitch of 25 μm

Copper products

- Development of dual-gauge copper strips for more effective heat radiation in small semiconductor packages
- Development of copper tubes for air conditioning equipment

Auto parts

- Development of halogen-free, 150°C-heat-resistant harnesses for use in hybrid electric vehicles

