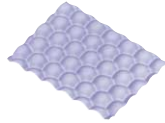


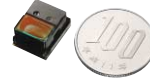
0.12  $\mu\text{m}$

MICROMIRROR SCANNER FOR THE LEXT OLS3000  
The OLS3000 achieved the world's finest resolution of 0.12  $\mu\text{m}$  in a laser microscope.



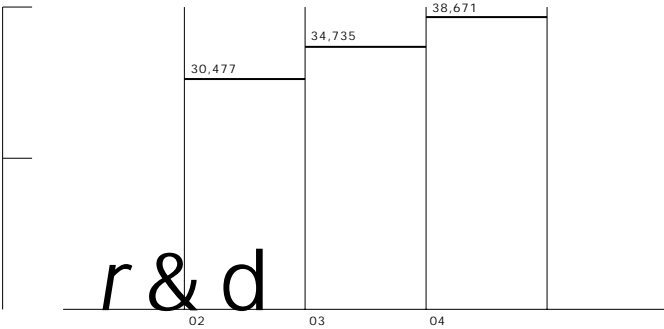
2 megapixel

THIN-LENS UNIT FOR CELLULAR PHONES WITH BUILT-IN CAMERAS  
Olympus developed cellular phone cameras with over 2-megapixel resolutions possible.



R&D Expenditure

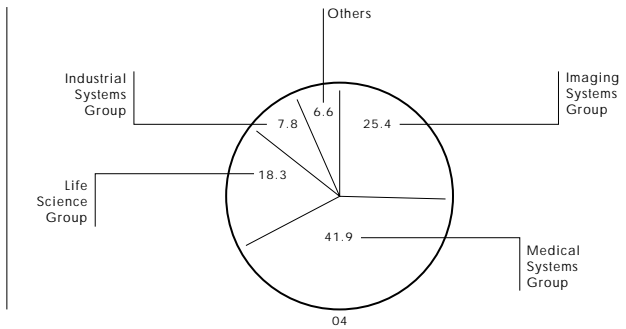
(Millions of yen)



r & d

R&D Expenditure by Segment

(%)



> Based on its core competence in OPTO-Digital Technology, Olympus engages in research and development in the optics, digital imaging, and microprocessing fields to provide new value to society.

In fiscal 2004, research and development expenses were ¥38,671 million (US\$352 million), an increase of 11.3% over the previous fiscal year. Research and development expenditures were 6.1% of net sales.

Restructuring of R&D

> In April 2003, Olympus restructured its Corporate Research and Development Center by reestablishing the center and creating the Future Creation Laboratory. The Corporate Research and Development Center undertakes the development of technology for product differentiation going one step beyond Business Groups, and the latest technologies that lead to the creation of new business in the future. The Future Creation Laboratory engages in long-term research in new business domains.

The Corporate Research and Development Center is in charge of research in three fields that are also crucial elements of the Corporate Technology strategies. The first is high-definition video systems development; the second is the development of micro-

electromechanical systems (MEMS) components and MEMS foundry services; and the third is the development of new medical businesses including regenerative medicine and capsule endoscopes.

Research Results

> Research results during this fiscal year included the development of the micromirror scanner with MEMS technology for our OLS3000 confocal scanning laser microscope. With the micromirror scanner the OLS3000 has a more compact body and better vibration resistance is realized; and using the combination of a laser microscope with the world's finest resolution of 0.12  $\mu\text{m}$  and an optical microscope, 3-D observation in color is possible.

In addition, based on its advanced imaging optical technology, Olympus has developed a free-shaped prism type thin-lens unit for cellular phones with a built-in camera, featuring the slimmest designs in the industry. Without enlarging the thickness of the lens unit, Olympus has made it possible to apply more than 2-megapixel resolutions to cellular phones.