Research

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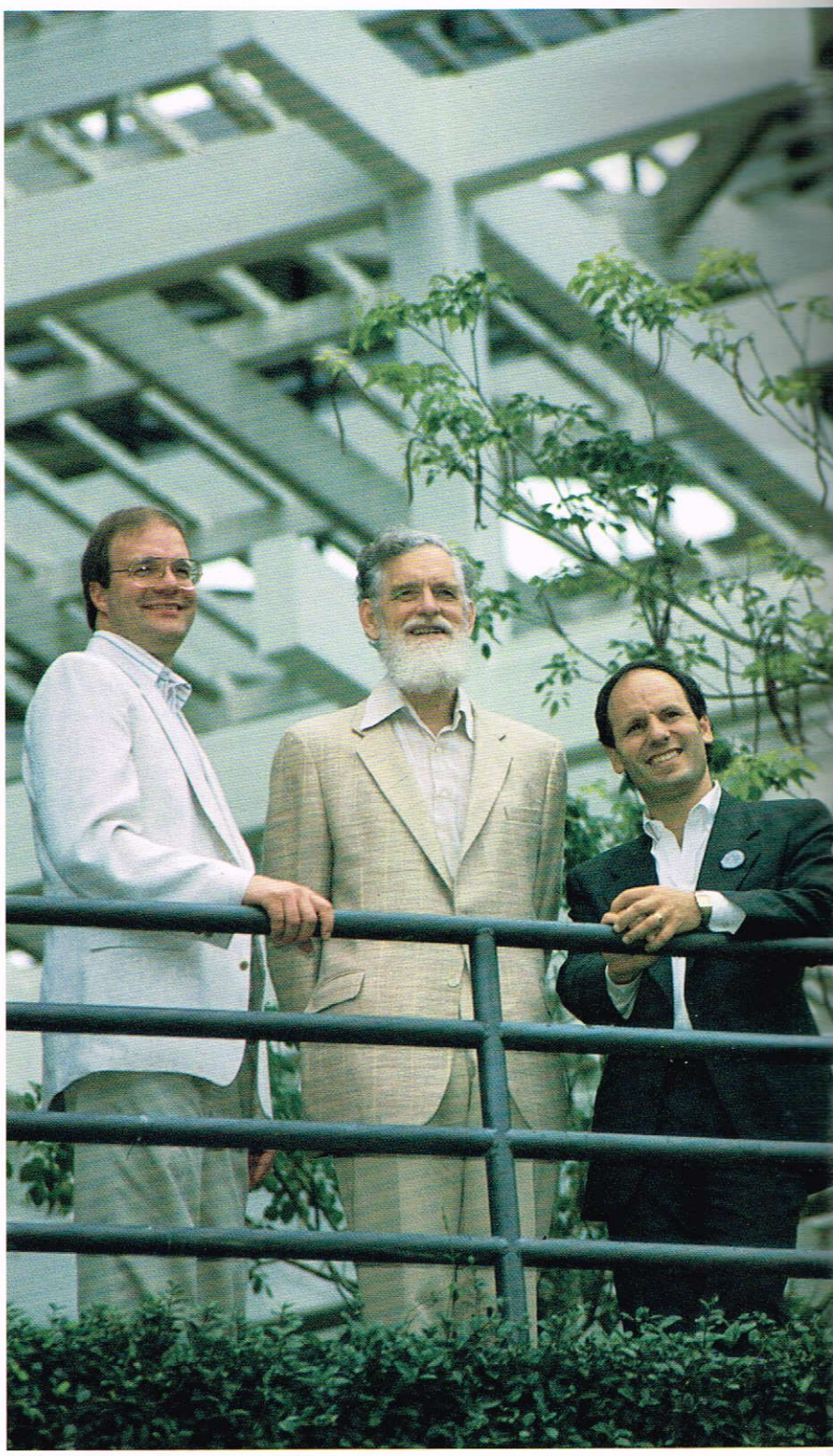
Researchers Ho

IBM's annual gathering of its technical elite at the Corporate Technical Recognition Event—held this year May 31 to June 3 at the Hyatt Regency Grand Cyprus Resort in Orlando, Florida—is the occasion on which new IBM Fellows are introduced, winners of corporate awards are announced, and several other types of technical achievement are recognized. This year, the Research Division gained one new Fellow (the division's second woman to be so honored) and was the recipient of six corporate awards.

Corporate awards are given in recognition of achievements that contribute exceptional value to the company or that represent major advances in science or technology. Three of Research's awards this year were for contributions to storage technology; the others, for work in the areas of user interfaces, memory chip technology and databases.



Robert Olyha Jr., Joseph Rutledge and Edwin Selker

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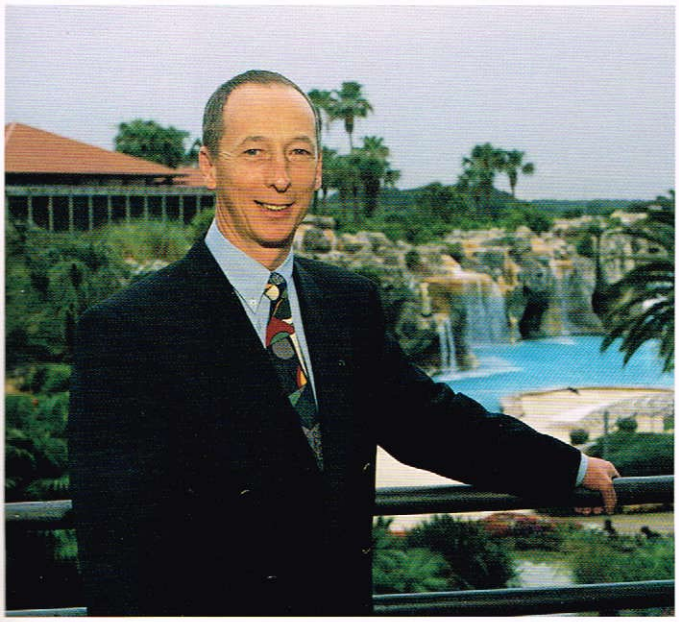

François Dolivo

Bruce Lindsay and Patricia Selinger

TrackPoint II™

Robert S. Olyha Jr., central scientific services, and **Joseph D. Rutledge**, mathematical sciences, Thomas J. Watson Research Center; and **Edwin J. Selker**, computer science, Almaden Research Center, shared $90,000 for the invention and development of the TrackPoint II pointing device. Located on the keyboard between the G, H and B keys, TrackPoint II provides the functions of a mouse without requiring desktop space or the removal of one's hands from the keyboard. The technical innovations of the TrackPoint—including a novel transfer function that translates finger pressure to cursor speed—have met with enthusiastic customer acceptance and have played a major role in the success of IBM's laptops. □

Signal processing for data channels

François B. Dolivo, Zurich Research Laboratory, and **Jonathan D. Coker** and **Richard L. Galbraith**, Storage Systems Division, Rochester, Minnesota, shared $100,000 for the design and development of Partial-Response, Maximum-Likelihood (PRML) data channels for disk drive systems. PRML is a digital signal-processing scheme that recovers the data—the bits—from the signals produced by the read head. Because of its superiority—compared to the traditional peak-detection technique—in distinguishing between closely spaced bits and in filtering out system noise, PRML has contributed to significant increases in areal densities and the integrity of stored data. □

Database architecture

IBM Fellow **Patricia G. Selinger, Bruce G. Lindsay**, computer science, Almaden Research Center; **Robert D. Jackson, Roger A. Reinsch, George E. Zagelow Jr.** and **Melvin R. Zimowski**, Software Solutions Division, Santa Teresa Laboratory, San Jose, California; and **Robert P. Resch**, AS/400® Division, Rochester, Minnesota, shared $110,000 for the design and development of the Distributed Relational Database Architecture™. DRDA™ is the primary architecture for data delivery in the information warehouse framework and forms the basis for the client/server offerings from IBM. DRDA defines the formats and protocols that support transparent access to any data source accessible through Structured Query Language. As SQL has become a de facto and de jure standard for database access, DRDA is strategically important as a basis for multivendor interoperability. □