

#### EMMETT J. MURTHA

#### PRESIDENT & CEO FAIRFIELD RESOURCES INTERNATIONAL, INC. STAMFORD, CONNECTICUT

Emmett Murtha formed Fairfield Resources International in 1997 after 35 years with IBM Corporation. The firm serves clients interested in developing, organizing and leveraging their intellectual assets, as well as in related strategy development and licensing transactions.

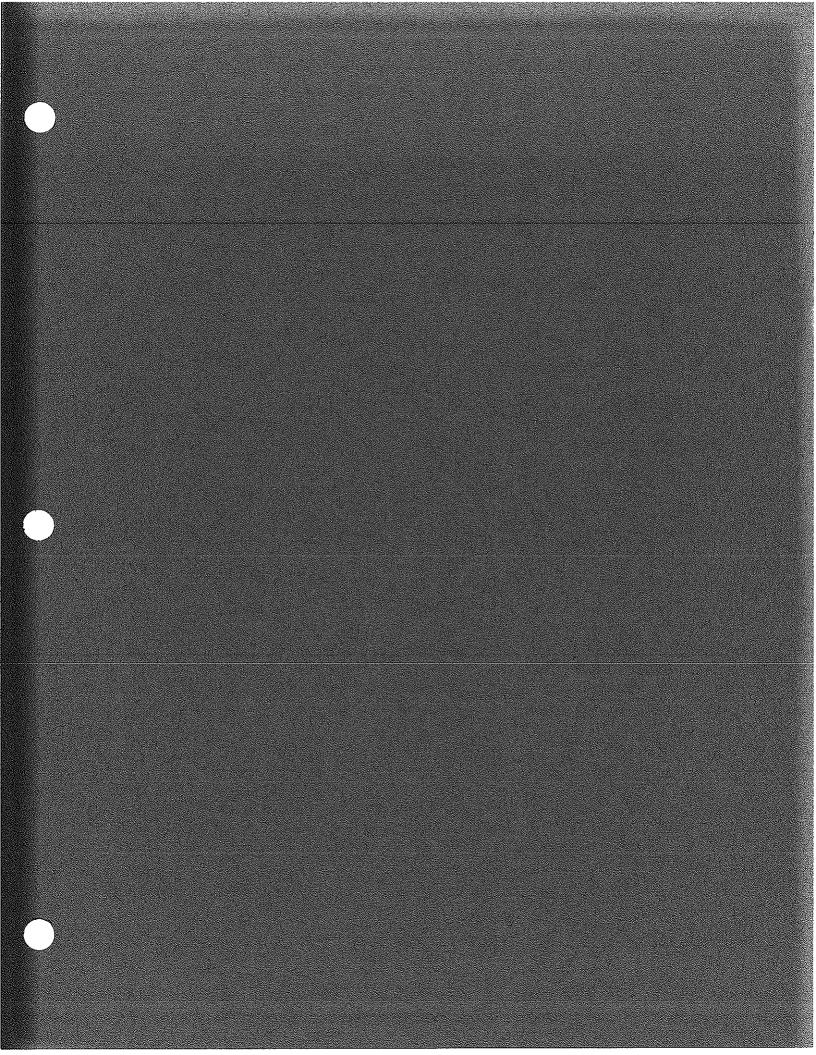
At IBM, Mr. Murtha was named Director of Licensing in 1981, leading a group which acquired rights from others under patents, copyrights, trademarks and technology, and also granted licenses under IBM's intellectual property. He was responsible as well for worldwide licensing policies and practices. Between 1987 and 1997, IBM's annual royalty revenues grew by over seven thousand percent.

From 1993, Mr. Murtha was responsible, as Director of Business Development, for finding new ways to leverage IBM's intellectual property and related strengths. Again, results were dramatic, with substantial transactions in medical technologies, and a continuous stream of future revenue opportunities clearly identified.

He has been a member of Licensing Executives Society for many years, including as an officer and a member of the Executive Committee. Mr. Murtha was President of the Society 1999-2000. He also headed the Intellectual Property unit of the National Advisory Committee on Semiconductors, is a frequent speaker on licensing, negotiating, and related topics, and is an Editorial Board member and a contributor of *The Licensing Journal* and *Patent Strategy and Management*.

Mr. Murtha has a degree in Accounting from the University of Connecticut and has completed executive programs at Columbia University Graduate School of Business and Harvard Business School. He is a member of the Board of Directors of the University of Connecticut Research and Development Corporation, and has also served as a director of early stage high tech companies, as well as a member of the Advisory Boards of the Intellectual Property Management Institute and of the Information Technology Fund, which invests in emerging high technology companies.

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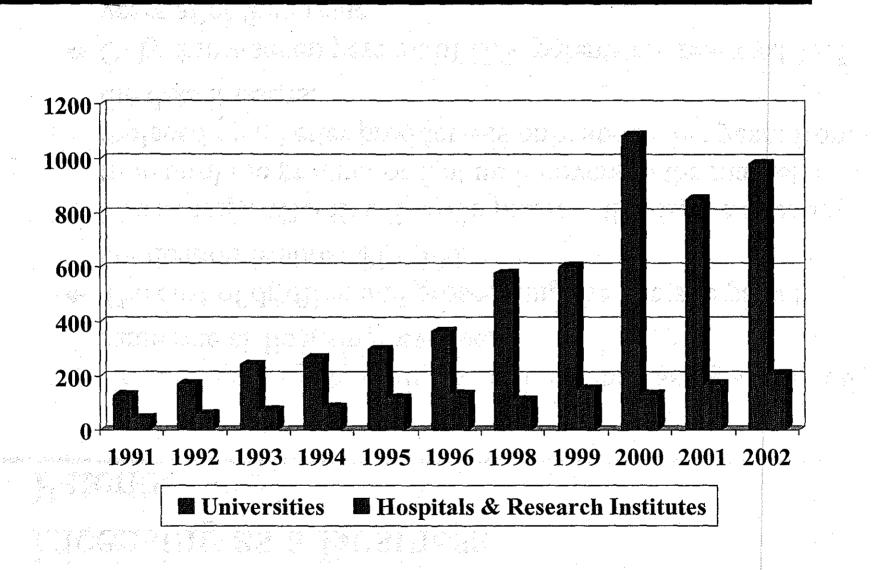
FRANKLIN PIERCE LAW CENTER

July 13, 2004

# Trends in Intellectual Property US Patents Issued for Top 10 Companies

|          | <u>.</u>          |                   | :                 |                   |                   |                     | hiy)                | •<br>•                        |                                 |                                 |                                 |
|----------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|-------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Rank     | 1993              | 1994              | 1995              | 1996              | 1997              | 1998                | 1999                | 2000                          | 2001                            | 2002                            | 2003                            |
| 1        | IBM<br>1,085      | IBM<br>1,298      | IBM<br>1,383      | IBM<br>1,867      | IBM<br>1,724      | IBM<br>2,685        | IBM<br>2,756        | IBM<br>2,886                  | IBM<br>3,454                    | IBM<br>3,288                    | IBM<br>3,415                    |
| 2        | Toshiba<br>1,040  | Canon<br>1,096    | Canon<br>1,087    | Canon<br>1,541    | Canon<br>1,381    | Canon<br>2,011      | NEC<br>1,842        | NEC<br>2,020                  | NEC<br>2,041                    | Canon<br>1,926                  | Canon<br>1,992                  |
| 3        | Canon<br>1,038    | Hitachi<br>976    | Motorola<br>1,012 | Motorola<br>1,064 | NEC<br>1,095      | NEC<br>1,639        | Canon<br>1,795      | Canon<br>1,890                | Canon<br>1,918                  | Micron<br>Technology<br>1,833   | Hitachi<br>1,893                |
| 4        | Kodak<br>1,007    | GE<br>970         | NEC<br>1,005      | NEC<br>1,043      | Motorola<br>1,058 | Motorola<br>1,542   | Samsung<br>1,545    | Samsung<br>1,441              | Micron<br>Technology<br>1,724   | NEC<br>1,821                    | Matsushita<br>Electric<br>1,786 |
| 5        | GE<br>932         | Mitsubishi<br>970 | Mitsubishi<br>973 | Hitachi<br>963    | Fujitsu<br>903    | Sony<br>1,445       | Sony<br>1,410       | Lucent<br>1,411               | Siemens<br>1,715                | GE<br>1,667                     | Hewlett<br>Packard<br>1,759     |
| 6        | Mitsubishi<br>926 | Toshiba<br>968    | Toshiba<br>969    | Mitsubishi<br>934 | Hitachi<br>903    | Samsung<br>1,308    | Toshiba<br>1,200    | Sony<br>1,385                 | Matsushita<br>Electric<br>1,666 | Hitachi<br>1,601                | Micron<br>Technology<br>1,707   |
| 7        | Hitachi<br>912    | NEC<br>897        | Hitachi<br>910    | Toshiba<br>914    | Mitsubishi<br>892 | Toshiba<br>1,237    | Fujitsu<br>1,193    | Micron<br>Technology<br>1,304 | Lucent<br>1,633                 | Matsushita<br>Electric<br>1,544 | Intel<br>1,592                  |
| 8        | Motorola<br>729   | Kodak<br>888      | Matsushita<br>854 | Fujitsu<br>869    | Toshiba<br>862    | Fujitsu<br>1,232    | Motorola<br>1,192   | Toshiba<br>1,232              | Samsung<br>1,623                | Sony<br>1,434                   | Philips<br>Electronics<br>1,353 |
| 9        | Matsushita<br>712 | Motorola<br>837   | Kodak<br>772      | Sony<br>855       | Sony<br>859       | Kodak<br>1,145      | Lucent<br>1,152     | Motorola<br>1,196             | Hitachi<br>1,494                | Siemens<br>1,429                | Samsung<br>1,313                |
| 10       | Fuji<br>632       | Matsushita<br>771 | GE<br>758         | Matsushita<br>841 | Kodak<br>795      | Mitsubishi<br>1,092 | Mitsubishi<br>1,054 | Fujitsu                       | Sony<br>1,443                   | Hewlett<br>Packard<br>1,390     | Sony<br>1,311                   |
| US Total | 109,746           | 113,587           | 113,834           | 121,696           | 124,068           | 163,147             | 169,086             | 175,980                       | 183,975                         | 184,531                         | 187,147                         |

# Patent Licensing Revenues for U.S. Universities, Hospitals and Research Institutes



# Licensing as a Business Patent Licensing

- About 3 percent of all patents are licensed.
- In 2004, U.S. patent licensing revenue will reach about \$165 billion.
- The average licensing value of any random patent is roughly \$216,000.
- The bottom 50 percent of patents account for only about 10 percent of aggregate patent value, while the top 10 percent of patents account for about 40 percent of it.

# Licensing as a Business Patent Litigation

• Only about 1 percent of U.S. patents are ever litigated.

- Only 54 percent of patents that are litigated are held valid.
- Plaintiffs win the whole case about half of the time.
- In 1000 patent trials from 1990-1999, there were only 249 money damage awards.
- The average district court patent damage award is \$18 million. (Median is \$5 million.)
- Attorney fees and costs average about \$1.5 million per side.
- A victorious plaintiff wins attorney fees and costs about half of the time.

What are the alternatives to licensing your patents?

#### Practice the monopoly

- 3M, Pfizer, biotechs, many startups and niche players
- Xerox copier patents, many General Electric business units

#### Selective licensing

- Intel, Kodak, Motorola, Texaco

#### Licensing as a business

- Canon, Dow Chemical, Texas Instruments, Lucent & IBM

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### Success Factors

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(IP Assets (Exposure))

Licensing Expertise

Corporate Will

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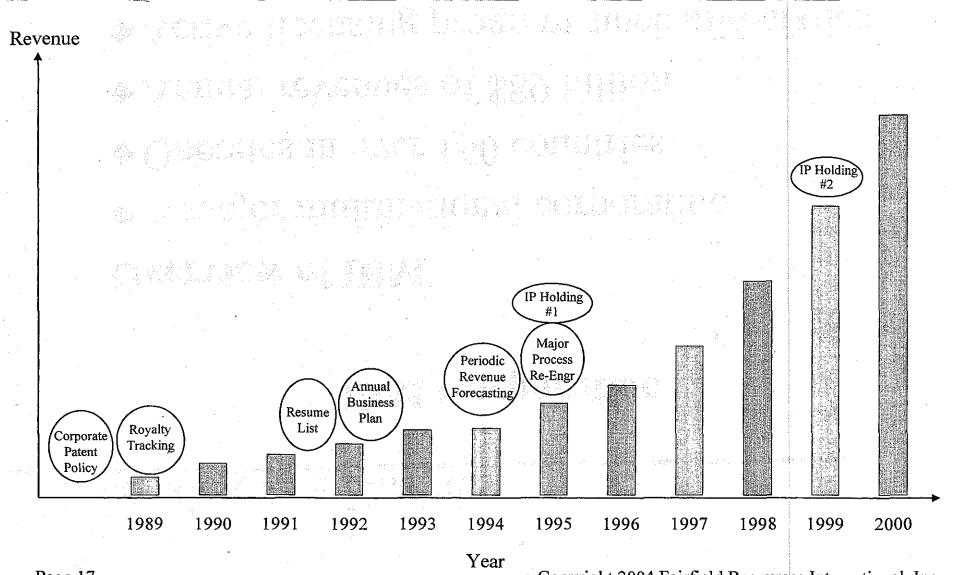
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# Examples Of Non-Core Licensing/Sale

|                |  | 1 <u>(</u>  |              |
|----------------|--|---|--------------|
| Company        | Non-Core Activities  |   | Income       |
| Honeywell      | Auto focus patents licensed broadly  |   | \$400M+      |
| TDX            | Eximer laser patents sold to LaserSight  |   | \$15M        |
| IBM CONTRACTOR | Wave division multiplexing patents sold to Tellabs   |   | \$6M         |
| Cirrus Logic   | Graphics patents sold to S3  |   | \$40M        |
| Dytel          | Voice processing patents sold to Syntellect  |   | \$3.7M       |
| Lucent         | Various non-core programs covering musical<br>instruments, consumer electronics, office products,<br>healthcare, horticulture, automotive, manufacturing, toys,<br>PC software, etc. |   | Confidential |
| GE             | Highly established non-core programs covering various markets  | i de las de l<br>Internet de las de | Confidential |

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Evolution of Patent Licensing Business at Lucent



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IBM's IP Assets

◆ Approximately 34,000 patents worldwide

- Leader in U.S. patents issued since 1993

• Over 10,000 trademarks

Vast portfolio of technology and software

- All intellectual property controlled by HQ
- Centralized licensing management
  - Licensing activity run as a business

– Multinational staff

Over 2500 active patent license arrangements
 – Almost half non-U.S.

### **IBM's Licensing Policy & Practices**

- ♦ Information handling systems
  - Generally open licensing policy
  - Non-discriminatory terms
  - Reasonable worldwide royalty rates
  - 1% sales revenue per patent used; maximum of 5%
  - \$25,000 creditable fee
  - No minimum payments
  - IBM gets a license option on same terms
- Other fields (non-core)
  - Laser, medical, chemical
  - Case by case

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**Practices reviewed periodically** 

- 1988 review concluded:
  - Rate of existing royalty was too low
  - Others were capitalizing on IBM's R&D
- Increased royalty rates to 1% per patent
- Launched major licensing campaign
  - Modest staff increase
  - Involved divisional resources
    - » Analysis, infringement proof, patent review, increased filing

#### **Results:**

- Revenue grew by nearly 10,000% since 1987
  - All income credited to divisions
- ♦ Minimal litigation

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### **IBM's New Directions:**

- Maintain U.S. patenting leadership
  - Focus on inventions with licensing value
- Aggressive, selective non-U.S. filing
- Exploit non-traditional licensing opportunities
  - Complex Technology-based Deals
  - Apply patents/technology outside industry
    - » Laser medical/dental
    - » Polymer chemistry
    - » Electronic entertainment
    - » Medical diagnostics and instruments
- Trademark licensing

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Involve outside consultants and engineers\*

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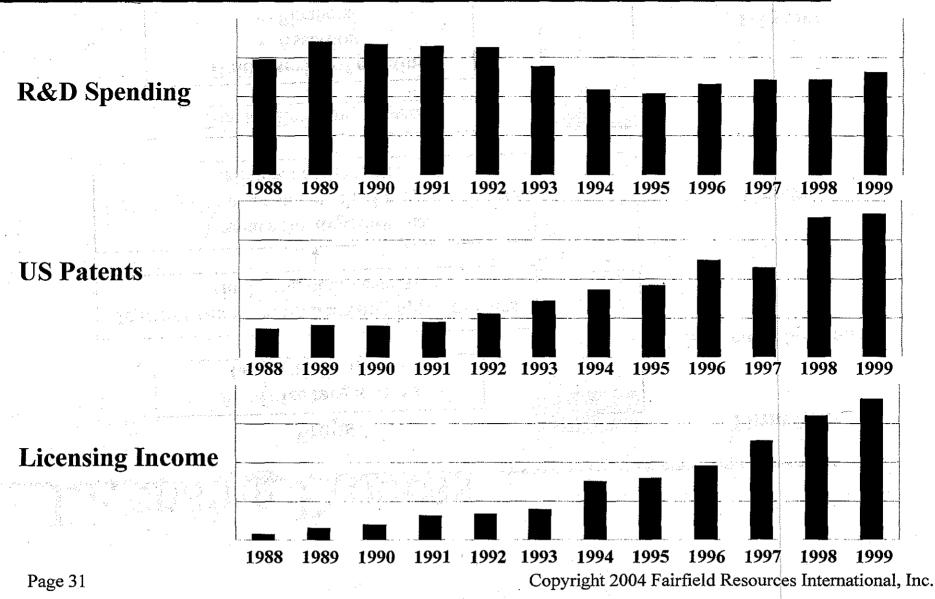
### **Lessons Learned at IBM**

Intellectual property is easily undervalued
A persistent, professional and reasonable program can yield surprising results
Involvement of business units is vital
Litigation is a risk, not a necessity

# Common Myths About Patents & Licensing

| Myth  | Reality  |  |  |
|---|--|--|--|
| The number of patents is the most important factor in the licensing business.                                     | Many major Asian companies are paying significant royalties to US companies with fewer patents.  |  |  |
| IP development is the passive result of R&D. One cannot control the quality or quantity of portfolio development. | The idea of a "patent factory" and "portfolio mapping"<br>has produced phenomenal results for some companies.<br>Screening for licensing value yields quality patents. |  |  |
| Licensing/R&D is the necessary cost of doing business.  | Licensing/R&D can be managed as a profit center.<br>Royalty income goes straight to the bottom line.   |  |  |
| One can create and license IP only in core business areas.  | Both IBM and Lucent have non-core licensing programs<br>that are highly successful. Non-core technologies often<br>provide value in broad cross-licensing deals.       |  |  |
| One cannot do much about outgoing royalty payments.   | Effective IP strategies can ensure significant royalty reduction in licensing deals.   |  |  |
| Patents are only for protecting existing markets.   | Patents often play central roles in developing new markets through selective licensing, exclusion or alliance.   |  |  |

# Patent Factory IBM Implementation (1988-1999)



# Licensing as a Business Key Benefits of IP Outsourcing

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| Dimension  | General  | Specific  |
|------------|--|---|
| Revenue    | Experience, contacts, reputation                   | Expertise in non-core areas                         |
| Growth     | Enhance access to revenue opportunities            | Identify new markets                                |
| Speed/Time | Rapidly increase revenue                           | Potential to deliver<br>substantial revenue quickly |
| Cost       | Control overhead and improve resource efficiencies | Success-based compensation                          |

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# Licensing as a Business Summary and Conclusion

Licensing is a Strategy, not an event
Royalty revenues are Pure Profit
Portfolio quality is the key
Extend your capabilities with outside help