

INTELLECTUAL PROPERTY AND LICENSING AT RIT

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A Discussion Document

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INTELLECTUAL PROPERTY AND LICENSING AT RIT

Introduction: Why is RIT Protecting and Licensing its Intellectual Property?

RIT, like many universities, recognizes that the intellectual property (IP) generated by its faculty, staff and students is an increasingly important asset of the Institute. Strategic management of RIT's IP portfolio has numerous benefits for RIT. It will enhance the reputation of the Institute thus enabling RIT to attract and retain quality faculty, staff and students and will move RIT's reputation in applied research to a higher level. Managing an IP portfolio supports the Institute's efforts to ensure that graduating students have been imbued with an entrepreneurial spirit and an applied understanding of IP and in turn enhances the Institute's academic reputation. The IP portfolio fosters interactions and partnerships with industry and government resulting in securing more research grants and contracts. RIT benefits from the transfer of its technologies for the use and benefit of society through jobs, new companies, new products, productivity improvements, and overall economic development. This results in an increasing revenue stream realized from licensing fees and royalties and equity positions in start-ups that will then be used to fund educational programs and additional research at RIT.

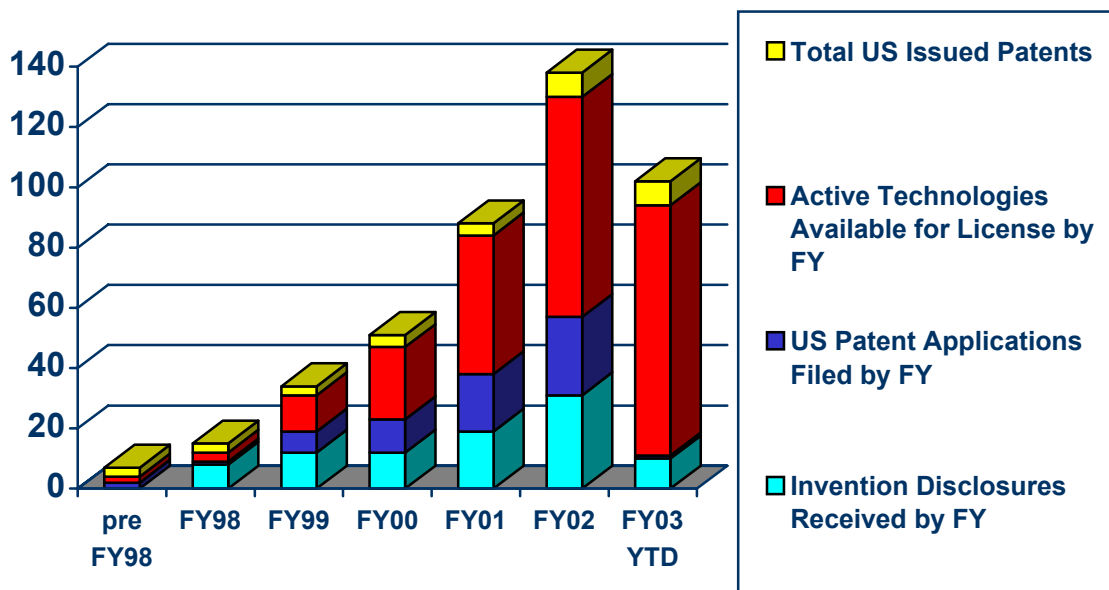
History and Growth of Protection and Licensing of IP at RIT (1997 – 2002)

In August 1997 RIT put in place a revised Intellectual Property Policy (C3.0) and has since been actively working to build its IP portfolio. In June 2001 RIT hired its first full-time licensing professional and in October 2002 we created a separate Technology Licensing Office (TLO). In this short time RIT's IP portfolio has grown from 3 to almost 80 technologies at various stages in the licensing pipeline (from invention disclosure to signed license). We now have 8 issued US patents, 32 pending US patent applications and 30 invention disclosures in the review process.

In the initial stages of growing an intellectual property (IP) and licensing function at a university, it's essential to foster and adopt a culture for technology transfer. This requires understanding, support, and participation from the University administration, faculty, staff and students. Significant effort has been put in outreach across the RIT community since implementation of the revised IP policy. We are seeing the successful adoption of this new culture at RIT.

The steady growth over time of the RIT Technology Licensing Portfolio is shown below:

RIT's Technology Licensing Portfolio



We have benchmarked RIT's growth in this area against comparable North American universities and find that RIT is basically on-track. We are enjoying a higher than normal rate of invention disclosures per capita. Licensing revenues are growing slowly, but this is what is expected in the early years of this kind of program.

RIT is poised to see real growth in licensing revenues in the near future. A few of the technologies driving this include:

- ASL Video Dictionary and Inflection Guide.
 - This CD-ROM product was launched in Summer 2000 and customer response has been excellent.
- Photolithography technologies at 180 and 157nm
 - A recently issued patent may put RIT in the position of having the enabling patent for photomask and photobank production at 157nm. Negotiations are in progress with a major corporation.
- Wiper Blade Assessment System
 - This device is used to test blades in toner cartridges. It was demonstrated at the World Expo Trade Show in Las Vegas in October and was deemed the most innovative product at the show. License negotiations are in progress,

Incentives to Inventors and Authors

Providing recognition and reward for participation in growing and leveraging RIT's IP portfolio is an important component of the licensing program. In April we held the second Inventors Dinner to recognize RIT's inventors, authors and creators. Seventy-two faculty, staff and students were recognized at that event. As the portfolio is growing we will be reporting accomplishments, both campus-wide and also by Department, College and Center. We are working with RIT News Services

to arrange a series of publicity pieces that will recognize RIT's innovators and entrepreneurs.

RIT's IP policy provides for generous sharing of licensing revenues with the inventors and authors. Inventors and authors receive 50% of license revenues after deduction of allowable expenses. In FY02 RIT made its first ever disbursements of license revenues with eight faculty and staff receiving checks ranging up to \$2400. The Institute's 50% share goes into the Provost's General Account and is disbursed to support research activities across campus.

We are seeing that inventors, authors, and Departments are becoming excited about seeing their technologies recognized, protected and moving out into the marketplace. We are hearing from faculty and staff that thinking about their work in terms of IP is becoming more important to them as they work to enhance their reputation in the academic community. These are signs that RIT's goals for IP are bearing fruit. We have come a long way since 1997, but there is still much more to accomplish.

Lessons Learned

RIT is in the start-up transition phase of establishing and growing an IP and licensing program. We have not yet reached a steady state of activity. This means we are in a phase of fast growth in numbers of available technologies and that associated licenses should follow in the coming years. At this stage in growth of a university licensing program, the program is yet too small to justify large investments in staff and budget. Thus we are looking at creative ways to meet the backlog of demand for IP and licensing services with limited resources. RIT must continue to move carefully to continue to encourage faculty, staff and students to participate in this new culture while being patient investors looking forward to future returns. In looking at how to best achieve this, we are also looking at lessons learned:

- 1) Faculty, staff and students are enthusiastically adopting a technology transfer culture.
- 2) Inventions are being disclosed at a faster rate than expected. This is excellent as it speaks to the amount of research being done at RIT.
- 3) In an effort to quickly build up an IP portfolio and to encourage adoption of a technology transfer culture, we've been filing on a large number of inventions. This has resulted in facilitating the culture change, but there is a financial cost to this. In future we need to be more selective about what is filed on.
- 4) The time from invention disclosure to deal closure is longer than expected. This is typical of licensing programs and needs to be factored into forward revenue estimations.
- 5) From our benchmarking study we learned that RIT's achievements to date are on track; that the issues we are facing are common to universities at this stage of growth in their licensing programs. We will continue to dialog with comparable universities to share issues and solutions.

Challenges

As a relatively new program, RIT faces many challenges in seeking to maximize returns from its IP investments. Our goal is to return TLO operational and associated IP costs within the next 2-3 years; with a long-term goal to provide a growing revenue stream to fund more research at RIT. Accomplishing this with limited resources will continue to keep us creative and resourceful as we cannot spend like industry. This translates into a spending tradeoff between the three main components of this program area: protecting, marketing and licensing IP.

We are very encouraged by the progress in adoption of a technology transfer culture across the campus. However, there is still much to be done in this regard. We will continue training, outreach and other activities to encourage a shift towards a culture of inventions, disclosures, patenting, licensing, start-ups and technology transfer. We must perform all related activities with a sensitivity to balancing performing appropriate due diligence and control on invention disclosures while maintaining and growing the enthusiasm of RIT's innovators.

The Technical Review Panel (TRP), the first formal step in the patent decision process, has just been expanded to include representatives from each College and Center across campus. The TRP is working on developing new standards for determining which inventions to patents. This will help in providing consistency of approach and ensuring the best inventions are brought forward.

Protecting IP is just a first step in moving a technology to the marketplace. We face real challenges in terms of marketability assessments and marketing given our limited resources. We are looking at what should be the role of the inventor in terms of identifying the marketplace opportunities. Also we are reviewing what level of marketing effort should be expended before filing a patent application and how much should be spent after. As foreign patenting is very expensive, we are transitioning to not seeking foreign protection unless there is an identified sponsor or licensee who asks for, and is willing to pay for, such protection. We are transitioning to a process for getting more feedback from the marketplace earlier in our licensing pipeline as a means of leveraging our resources and being more effective. We continue to network with other universities to seek ways to be more effective in terms of direct marketing, sales and technology licensing.

Support from the Board of Trustees

RIT has implemented an IP and licensing process and is well on the way to filling that pipeline with licensable technologies. RIT has generous incentives in place for inventors and authors who actively work to get IP protected and commercialized. Where RIT is still refining its process is on the marketing end of the pipeline. Many on the Board of Trustees are well positioned to provide assistance to RIT in assessing the commercial potential for specific technologies (as licensing prospects or as start-up candidates) and in identifying and providing introductions to potential corporate licensees and business builders. We would ask that the Board consider providing this support to RIT's TLO. We believe RIT is positioning itself well for long-term growth in this area and look forward to accelerating this growth with the assistance of the Board.