Research Corporation

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George M. Stadler
Executive Vice President

October 15, 1984

Mr. Norman Latker
Director for the Office of
Patent Policy
U.S. Department of Commerce
Room 4816
14th and Constitution N.W.
Washington, D.C. 20230

Dear Norm:

I understand from Jess Laskin that the new small business and university patent bill passed Congress. Congratulations!

Perhaps we can now move forward with RC's modified proposal to the Department of Commerce to provide a training for on-site patent administrators and back-up technology transfer/commercialization services for the government laboratories.

I have also enclosed a copy of the venture capital fund we are raising with E.F. Hutton for university technology -- UTECH. I have talked with the people at Hutton about developing a similar venture fund ($20-40 million) for use with government laboratory inventions. They are interested, especially is someone like yourself could take a leave of absense and become involved with the initial management and direction of such a fund. The same concept of "pre-seed" and "seed" capital would be involved. We would have to modify section II (UTECH concept); section III (Background); and section IV (Present Environment) to reflect the present situation as it pertains to the government laboratories.

Any interest in helping to develop -- LabTECH?

Let's discuss.

Very truly yours,

George M. Stadler

GMS/sk
Enclosures

SEP 07 1984

E. F. Hutton & Company Inc. 101 California Street, San Francisco, California 94111 (415) 362-5225

Thomas B. Calhoun
First Vice President

(Attachment a)

September 6, 1984

Mr. Alan N. Alpern
25 Sutton Place
New York, New York 10022

Dear Mr. Alpern:

I am writing in response to your letter of August 8, 1984 forwarding a proposal for the formation and funding of University Technology Fund "UTECH" in association with Research Corporation of Tucson, Arizona.

We have been in discussions with officers of Research Corporation and you since March of this year and feel that the proposal forwarded with your letter reflects those discussions and is in a form which will permit us to act as Placement Agent in an effort to raise $25 million privately from institutional sources. We believe that the concept is sound and that there are institutional sources which would be interested in the opportunity to invest at the "pre-seed" and "seed" levels in new technologies, particularly given the very broad access to billions of dollars of annual R&D effort represented by UTECH's association with Research Corporation.

Accordingly, we are prepared to use our best efforts to market the UTECH Fund when an acceptable Offering Memorandum and related legal documents have been prepared. We will review with you periodically the progress made in the marketing effort and propose that after 90 days we jointly evaluate the response of the marketplace.

We look forward to working with you, the other principals of UTECH and the officers of Research Corporation to achieve UTECH's objectives.

Very truly yours,

Thomas B. Calhoun

TBC/ld

cc: John P. Schaefer
BCC. G. STADLER

MEMO TO: File

FROM: G. M. Stadler

DATE: November 1, 1984

RE: UTECH Fund Structure

I. Summary

II. UTECH Concept

III. Background

IV. Present Environment

V. UTECH'S Relationship with University Technology Transfer Professionals

VI. UTECH'S Structure

VII. Pro-Forma Example Transaction

I. SUMMARY

1. There is a widely-held view that innovations necessary for enhanced productivity of American business enterprise can be fueled by university-based technologies.

2. Many universities are strengthening their administrations and pursuing a wide range of initiatives in an effort to attract support for their R&D activities and to exploit the inventions that result therefrom.

3. University administrators and faculty perceive a need for a venture fund dedicated to the earliest stages of innovation; stages during which the government and traditional venture funds typically are not involved. Such a fund would complement traditional university technology transfer -- i.e., licensing established companies. The UTECH Fund has been designed to accomplish this objective.

4. UTECH will be a $25,000,000 venture fund designed to make "pre-seed" and "seed" investments in university technologies. E.F. Hutton will market the fund to institutional and corporate investors in units of $1 million or more.

5. UTECH will be a limited partnership. The corporate general partner (UTMC) will be responsible for all investment decisions and will manage the fund's activities concerned with the commercialization of university inventions. UTMC will benefit from an Advisory Board of university technology transfer professionals.

6. UTECH will deal with university technology transfer agents including Research Corporation (RC) and University Patents, Inc. (UPI) and with certain universities directly. UTECH does not expect to have any right of first refusal to any organization's or university's technology. However, these organizations will show UTECH, as well as other interested parties, those projects which would benefit from venture development.

7. Universities will also benefit from a Special Grants Fund, which will be structured out of a portion of UTMC's profits to support basic research in the physical and life sciences. UTMC will select an appropriate institution/organization to administer this fund.

II. UTECH CONCEPT

1. The UTECH fund is designed to finance "pre-seed" and "seed" phases of new technologies, during which university-based technologies will be assessed for their potential for the venture stage of development. Because of the number and diversity of university-based inventions, it will be the general policy of UTECH to review only those disclosures that have been screened and evaluated by experts in technology transfer. The UTECH staff, assisted by consultants having expertise in specific industries and markets, will investigate, select, and negotiate agreements with the university technology transfer community including RC, UPI and other recognized professionals. Concentrating on the early stages of development, UTECH intends to provide the entrepreneurial skills and to perform the business functions necessary to establish the technological, manufacturing, and marketing feasibility of projects. The three phases envisaged for UTECH involvement are as follows:

A. "Pre-Seed" Phase. UTECH will fund approximately twenty (20) contracts annually in the amount of $50,000 to $150,000 for R&D to be conducted at the originating institution. UTECH will receive an option to license the technology. Approximately $2 million per year for a period of four years (a total of $8 million) is thus allocated for university-based research and development activities. These activities will include prototype development and/or further testing to establish operability and technical feasibility, or in certain special cases, reduction to practice or data collection to support proof of principle.

B. "Seed" Phase. Over the first five years, it is anticipated that approximately $6 million will be committed to about twenty projects. Ranging from $150,000 to $500,000, these investments will be used to refine the technology -- up to the stage of pre-manufacturing and/or production prototypes; begin establishing FDA protocols and initiate appropriate IND studies; develop a business plan for its exploitation; and create the business infrastructure necessary to bring the technology to the venture phase. A portion of the investment may be expected to take the form of an R&D contract with the originating institution. The "seed phase" will involve exercising the option to the aforementioned license. In the event a company is formed to exploit the technology, consideration for the license agreement may include the opportunity to obtain an equity interest, either as all or part of the initial license fee or through a convertable royalty provision of the license agreement.

C. "Venture" Phase. Although UTECH plans to concentrate on the "pre-seed" and "seed" phases, allocating some $14 million to these purposes, investments of up to thirty-five percent of the funds required in the venture phase are anticipated for approximately eleven projects. When combined with funds from other sources (e.g., traditional venture funds) these investments will bring new companies to the point of initial operation. UTECH plans to be the central party in forming, staffing, and supervising the management of entities formed at the venture stage. Hutton may assist UTMC in arranging the further financing for these entities.

III. BACKGROUND

1. The United States technological leadership has eroded in recent years.

A. Over the past 20 years R&D expenditures as a percentage of GNP have declined in the U.S. while Japan and West Germany were increasing these expenditures.

B. In the 1950's the U.S. was credited with 80% of all major inventions made during that period. However, in the 1970's the U.S. share of major inventions dropped to 60%.

2. During the 1970's the U.S.'s high technology industries exhibited an outstanding performance in the area of new job formation and after-tax return on equity. As a result:

A. More than 100 bills to promote high technology development have been introduced in the U.S. Congress with the intent of establishing a proper high technology industrial policy; and

B. More than $4.1 billion of venture capital was raised in 1983 by 87 venture firms for future investment in high technology opportunities, and $2.33 billion was invested in 1983 as follows: $571 million (29%) in 833 start-ups; $543 million (27%) in second, third, fourth, and mezzanine-round financing in 685 deals; $280 million (14%) in 135 leveraged buyout situations; and $940 million (40%) in "follow-on" investments made by these firms in previously financed deals.

3. Research expenditures at U.S. universities represent a significant national investment. During fiscal 1982 universities had slightly more than $7.2 billion of R&D support -- life science, $4 billion; engineering, $1 billion; physical science, $.8 billion; other fields, $1.4 billion. However, the support of university research has not kept pace with inflation and, as a result, has declined in real terms.

4. As a result of annual research funding, U.S. universities have always been a source of leading-edge technology. However, these technologies are usually very early-on in their development cycles and generally require development capital -- "pre-seed" capital -- in order to clarify their commercial potential.

5. Unfortunately, "pre-seed" capital for university technology is generally neither available from government sources nor from traditional venture capital sources. Thus, in the past, university technologies had to be licensed to established companies for possible commercialization.

6. Established companies have not always proven to be the best environment for the development of university technologies because of a variety of circumstances:

A. No in-house product champion;

B. Changing corporate business objectives;

C. Competition for both internal development funds and with internally competitive products; etc.

7. If university technology is to be developed outside traditional licensing, more than just "pre-seed" capital will be required. Availability of additional "seed" capital will also be necessary to finance prototype development and to begin creating the business infrastructure needed to bring the technology to the manufacture/marketing stage -- "venture" phase.

8. In addition to both "pre-seed" and "seed" capital, the entrepreneurial spirit and drive must be added to each venture through the development of the appropriate management team and the team's phasing/timing into the new venture must be properly integrated.

9. If the university's technology base is to be maximized, a vehicle needs to be established which would provide an alternative to traditional licensing for certain technologies.

10. The appropriate university technology transfer alternative should provide:

A. Investment capital (both "pre-seed" and "seed");

B. New venture planning and implementation;

C. Creation of new business infrastructure and their related entrepreneurial management team; and

D. Ease and speed of finalizing venture transactions within the normal/traditional mechanisms used by the university technology transfer community and their agents (RC, UPI, etc.) for the transfer process.

phasing/timing into the new venture must be properly integrated.

IV. PRESENT ENVIRONMENT

1. University administrators and faculty are becoming increasingly aware of the importance technology transfer holds for their institutions; not only as a source of revenue to accommodate opportunities for growth or to offset losses from other sources, but also as a measure of their contributions to society. This phenomenon has occurred for a number of reasons. Principal among them, however, is the widely-held perception that technological development is particularly important, perhaps crucial, for the future of American business enterprise and that our universities can and should be the birthplace of the concepts that will fuel that development.

2. University trustees, administrators, and faculty are reacting in varied ways to this phenomenon. Some prefer to maintain traditional values of the academy and avoid relationships that might compromise those values. Many are finding it desirable if not necessary to accommodate these values without foregoing the intellectual and economic benefits resulting from government-industry-university cooperation in advancing science and technology.

3. In their enthusiasm to be at the "state-of-the-art" in university-business relationships, college and university administrators and faculty have naturally directed their attention to what they themselves can do to accelerate the flow of support for research and to fully exploit the economic potential of their inventions.

A. Work more closely with university technology transfer agents; and

B. Establish in-house technology transfer programs.

4. An increasing number of universities and their faculty inventors are expressing interest in receiving equity positions (or combinations of equity and royalties) for their technologies. Equity positions in new ventures are perceived as growing assets that will last beyond the life of most patent/license agreements, thus providing larger returns. These ventures often provide an improved environment for faster product development and market entry.

5. Therefore, the stage is set for the establishment of a university technology transfer mechanism which will satisfy the present objectives of university trustees, administrators and faculty; and, which would make available the resources needed to achieve success. The UTECH FUND was conceived and developed for this purpose.

6. The $7.2 billion of university support is spread over more than 500 institutions of the U.S. university community. However, almost four of every five research dollars were expended by one hundred institutions. These top one hundred institutions can be further broken down into the "top fifty" and the "second fifty."

A. The "top fifty" institutions expended $4.42 billion or 60.9% of the total university research dollars. RC* clients number 32 and account for $2.7 billion and UPI* clients number 6, accounting for an additional $570 million.

B. The "second fifty' institutions expend more than $1.58 billion or 21.8% of the total university research dollars. RC clients number 39 and account for $1.2 billion and UPI clients number 2 accounting for an additional $50 million.

C. Neither RC nor UPI have agreements with schools in the California system (UC-San Diego, UCLA, UC-Berkeley, UC-San Francisco, UC-Davis, UC-Riverside, and UC-Irvine -- $596 million); MIT ($192 million); University of Wis-Madison ($160 million); Columbia ($115 million); Harvard ($114 million); and several other important research institutions.

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*RC's clients operate under non-exclusive agreements and many of these clients also operate various levels of in-house programs; UPI clients operate under exclusive agreements -- i.e., UPI has a right of first refusal.

California system (UC-San Diego, UCLA, UC-Berkeley, UC-San Francisco

7. Thus, if UTECH is to be successful in identifying and supporting those university technologies which have commercial potential and would benefit from venture development rather than traditional licensing, UTECH must be free to deal with all sources of university technology including agents such as RC and UPI, and directly with certain universities having established in-house programs.

A. From a cost effectiveness standpoint, UTECH plans primarily to work with the university technology transfer agents or established university professionals because these agents/professionals will have already established contact with the faculty inventor; evaluated the technology's patentability, technical feasibility and marketability; and will have filed both domestic and foreign patent applications.

B. UTECH when dealing directly with universities not having established professionally operated in-house programs will not see highly screened and evaluated technologies and will thus have to conduct this analysis internally. If UTECH operates in this mode, it will have to allocate resources for activities which are not the primary objectives of the fund. As a result, this mode of interaction will not be encouraged.

V. UTECH'S RELATIONSHIP WITH UNIVERSITY TECHNOLOGY TRANFER PROFESSIONALS

1. UTECH sees the professional technology transfer community as a cost effective source of investment opportunities. Although UTECH may receive, evaluate, and invest in opportunities from institutions not represented by a technology transfer agent, it sees this as not the most desirable route for various reasons and will encourage universities to work through these agents. It is therefore anticipated that institutions represented by agents such as RC and UPI will be a principal source of investment opportunities.

2. The availability to the university community of a fund of this unique type represents a much needed service that the agents can offer to its institutional clients. Funding for the support of promising but unproven concepts, new opportunities for the commercialization of university-based inventions, and the option to participate in the growth of companies formed to exploit the technology represent services viewed by university administrators and faculty as being essential for "state-of-the-art" management of technology transfer.

3. Technology transfer agent's relationship with UTECH will be similar to relationships now extant with other industrial and/or financial organizations. The principal difference is one of having available an organization (UTECH) funded and structured in such a way that specific needs of the agent's client institutions can be met more efficiently and effectively. Characteristics of the relationship are as follows:

A. The agents will represent UTECH to their institutional clients.

B. The agent's staff will evaluate disclosures and assess the opportunities available for commercialization. When UTECH offers the best alternative, disclosures will be referred to UTECH's management for action.

C. The agent will represent client universities/inventors in negotiations with UTECH regarding all aspects of any transactions, e.g., terms of options and license agreements, R&D contracts, consulting agreements, etc.

4. The agent will not have an equity position in the general partnership nor will it participate in the profits of the partnership.

5. An individual representing the agent may be on UTECH's Advisory Board in addition to other members of the university technology transfer community.

6. The agent will have no obligation to submit disclosures for UTECH's evaluation. UTECH will have no right to review, no right-of-first-refusal.

7. The agent's financial interest will be realized on a project-by-project basis through the acquisition of a mixture of equity and/or royalties.

VI. UTECH'S STRUCTURE

1. UTECH will be a $25,000,000 limited partnership. E.F. Hutton will use its best efforts to market the fund privately in units of $1,000,000 or more with pension funds and other institutional and corporate investors.

2. Hutton will receive a placement fee equal to two and one-half (2.5) percent of gross proceeds and will participate in the net profits realized by the general partner.

3. UTECH's General Partner, UTM Corporation (UTMC) will be a newly formed Delaware Corporation owned by Alan N. Alpern, George M. Stadler and Ron Stephens, each of whom will serve as officers and directors of the corporation.

4. UTECH will have an Advisory Committee which will include Thomas B. Calhoun of E.F. Hutton; John P. Schaefer of RC; L.W. Miles of UPI; and several additional members of the university technology transfer community.

5. Profits and losses accruing over the life of the partnership (UTECH) and upon its termination at the end of ten years will be assigned to the limited partners (80%) and general partnership (20%).

Eighteen percent of the General Partnership's profits will be contributed to colleges and universities through a special grants program designed to support basic research in the physical and life sciences. Hutton will receive nine percent of the profits accruing to the general partnership for certain investment banking services.

6. Profitshare of UTECH's corporate general partner, UTMC, will be as follows:

Alan N. Alpern	18%
George M. Stadler	18%
Ron Stephens	18%
Unassigned (add. Sr. Mgmt.)	11%
Reserved (add. Jr. Mgmt.)	6%
Special Grants Fund	18%
E.F. Hutton	9%
Advisory Committee	2%
Total	100%

7. The Grants Fund will support basic research in U.S. colleges and universities in the areas of the physical and life sciences. Participation in the Fund will be free of any technology ownership restrictions. Administration of the Special Grants Fund will be designated by the board of UTMC at some future date; however, the managing

directors of UTMC will not participate in its administration. Depending on the degree of success experienced by UTECH, the Special Grants Fund can be expected to produce nothing or as much as $3.6 million in support of academic science.

8. Brief resumes of UTMC's managing directors follows:

A. ALAN N. ALPERN holds a B.A. degree from Harvard College and a J.D. degree in Law from Harvard Law School. He is a member of the Bar in both New York and Massachusetts. From 1977 through 1983, Mr. Alpern served as President or Chairman of the Executive Committee of XOIL Energy Resources, Inc., a corporation which engaged in the syndication of over fifteen oil and gas exploration projects, and as President of Energy Solutions, Inc. and Xplor, Inc., its subsidiaries. From 1975 to 1977, and since his resignation from XOIL and its subsidiaries in 1983, he has been a financial consultant in New York City. Since 1959, Mr. Alpern has also been engaged in various financial and industrial activities. For example, he founded On-Line Systems, Inc., a company involved in computer operations and listed on the American Stock Exchange prior to its acquisition by United Telecommunications, and was an original director of MCI, New England, Inc., a constituent company of MCI, Inc. He was also Chairman of the Executive Committee of Aberdeen Petroleum, listed on the American Stock Exchange, prior to its sale to Adobe Oil & Gas in 1974.

Mr. Alpern has also served as a full-time financial consultant to Ladenburg, Thalmann & Company, a member of the New York Stock Exchange, for Corporate Finance, and to Walter Kidde & Co. for divestitures. He is presently the Principal of Ceresana, N.V., engaged in experimental agricultural production in Pakistan, Italy and the Dominican Republic.

B. GEORGE M. STADLER holds B.S. degrees in Chemistry and Biology, 1969, and an M.S. degree in Physics from John Carroll University. Since 1982, he has been Executive Vice President of Research Corporation of Tucson, Arizona and New York City, a foundation established to advance technology through its grants and patent/licensing programs. In 1980, Mr. Stadler co-founded University Genetics Company (Norwalk, Connecticut), a venture capital company engaged in medical research. From 1976 through 1982, he was Assistant to the President of University Patents (Norwalk, Connecticut), a company involved in licensing of technologies, assessment of new venture opportunities, and the creation and formation of university technology transfer vehicles, including the design of R&D limited partnerships.

C. RON STEPHENS holds a B.S.E.E. degree from California State University, 1964; an M.B.A. degree from California State University, 1969; and a J.D. degree from Boalt School of Law, University of California, Berkeley, 1969. From 1981-1984, Mr. Stephens was President and Chief Executive Officer of Votan, Inc., a voice technology company, located in Fremont, California, which he founded. In 1978, he was employed by Arthur D. Little to develop a high technology consulting practice in the Western U.S. After successfully completing the assignment, Mr. Stephens took a leave of absence to launch Votan, Inc. From 1976-1978, Mr. Stephens was General Manager of Microprocessor Products at General Instrument, Inc. (Hicksville, New York). Prior to that, he was President of Xebec Systems, Inc., which he joined in 1975. Mr. Stephens has also held positions as Division Manager, High Reliability IC Products at Signetics Corporation and Management Consultant at McKinsey & Company.

VII. PRO-FORMA EXAMPLE TRANSACTION

NOTE: The following example is not intended to reflect any actual situation nor to create a model or norm for determination of arrangements in any future UTECH - Client arrangements. In all cases in the future, the specifics of a particular transaction will be negotiated by the parties. Their views on the uniqueness of the technology, future costs and manufacturing and commercial viability, will determine the terms of negotiations.

1. Assumptions

A novel analytical instrument is developed at a RC client university. The annual worldwide market in which this instrument will compete, a field with few recent innovations, is estimated at approximately $100 million, and is currently projected to grow at a rate of 10% for the next eight years (the availability of the new instrument is expected to expand the market and accelerate this rate). The instrument exists as a rough "bread-board" model at the university.

A. Phase 1:

Approximately $100,000 ("pre-seed" capital) is needed to develop a test prototype instrument and to collect additional critical data that would further support the utility of the instrument. It is determined that the university and the inventor are capable of meeting these research objectives within six (6) months.

B. Phase 2:

The next step (assuming success in Phase 1) would be to design a "pre-manufacturing" prototype instrument and six prototypes. This may be accomplished by subcontracting the work locally, where the support of the university and inventor are readily available. The cost projected for this phase of activity is approximately $300,000 ("seed" capital) and it can be accomplished within nine (9) months. A further objective in this phase would be to place the six prototypes in established, independent laboratories for three (3) months to check for reliability and dependability.

C. Phase 3:

Again, assuming success and based on evaluation by UTECH of all relevant factors, it is determined that a new, independent company should be established to manufacture and market the instrument. Alternatively, UTECH may decide to sell or sub-license the technology, for cash and/or securities and royalties, if UTECH's criteria for a new, independent entity are not met. The business plan to accomplish this start-up calls for funding of $1.5 million ("venture" phase) of which $250,000 would be borrowed. The relatively low cost of "venture" funding in this case relates to the limited product line and the well-defined laboratory market. Because of the new instruments' advantages (speed, accuracy, lower cost,

versatility, etc.) and because of the patent position, it is projected that the new company will capture 7% of the total market at the end of three years. The profit margin during this period would be 15%.

D. Phase 4:

Based on the successful introduction and operation of the instruments, the new company can position itself to capture an additional 20% of the market. Funding requirements are $4.5 million to achieve these objectives.

2. Pro Forma Relationship Between RC and UTECH

RC presents the above-described technology to UTECH. UTECH reviews and subsequently negotiates a development/license agreement with RC on the following terms:

A. UTECH would fund $100,000 of research at the university under a six (6) months R&D contract to meet the objectives of Phase 1 ("pre-seed"). UTECH would obtain any "improvement inventions" made during this funded research.

B. UTECH would agree to pay RC a royalty of 7% on sales price to end-users, in the case of direct sales, and on price to distributors, who would, of necessity, be required to achieve the projected sales levels.

C. If UTECH is satisfied with the results of the "pre-seed" phase, it will be committed to spend an additional $300,000 over the next nine (9) months for development. If it elects not to proceed to such development ("seed" phase), all UTECH rights will terminate.

D. UTECH may elect to form a development subsidiary ("NewCo") for either the "seed" or "venture" phase, in which event it will issue to RC 10% of the initial shares of NewCo in lieu of an "up front" cash payment for the license option. The equity of RC would remain undiluted through investment of an aggregate of $400,000 in the technology. If UTECH elects to license an established company, rather than form NewCo, RC will receive 50% of any consideration received, in addition to its 7% royalty on sales. UTECH will have one (1) year to proceed with a plan of commercialization, after which it will be responsible for minimum royalties. If UTECH does not proceed with such a plan, rights will revert to RC, with some percentage of future profit flowing to UTECH to recover its "seed" investment in the event of commercialization by others.

E. In addition, RC will have the right to convert one-half of its royalties into an additional 10% of the shares of NewCo, provided that such election is made upon completion of the "seed" phase. Thereafter, RC may have the right, for some period to

exchange a determined amount of royalty flow into additional shares of NewCo. For purposes of this example, it is assumed that RC exercises the initial conversion option.

F. RC would grant UTECH a worldwide exclusive license to the technology, subject to the foregoing.

3. Financing Plan

A. UTECH will use its own funds to finance the $100,000 Phase 1 "pre-seed" cost. Assuming success, UTECH will proceed to form NewCo and to supply $300,000 of Phase 2 "seed" capital from its own resources. At the close of this phase, and before the "venture" Phase 3 - Financing, RC will exercise its option to convert one-half of future royalties into a 10% equity interest in NewCo. At this point, NewCo royalty payments to RC would be reduced to the 3.5% level, UTECH's gross investment in the technology would be $400,000 and the ownership of NewCo would be as follows:

RC	- 20%	(initial position plus royalty conversion)
NewCo Management	- 15%	(may be reserved but not issued if UTECH does not wish to commit itself to developing NewCo as an independent entity at this stage)
UTECH	- 65%	
TOTAL	100%	

B. Based on Phase 2 "seed" results, UTECH will proceed with a private round of "venture" financing. Because of the limited product line and well-defined laboratory market, UTECH estimates that production and marketing costs for the period prior to cash flow viability will be $1,500,000 (less than in the typical case). UTECH will arrange a $250,000 borrowing (equipment lease or the like) for NewCo, will invest $500,000 of its own funds and obtain $750,000 from new investors, who may include Limited Partners of UTECH. After this "venture" round of financing, ownership will be as follows:

RC	- 12.4%	
NewCo Management	- 9.3%	
UTECH	- 55.5%	(40.3% old plus 15.2% from new "venture" investment)
New Investors	- 22.8%	
TOTAL	100.0%	

C. Phase 3 goes according to plan. NewCo's sales at the end of three (3) years (four and one-half years from project inception) are $10 million and pre-tax profit is approximately $1,500,000. NewCo is paying a royalty to RC of $350,000 per year.

D. NewCo decides to expand operations (Phase 4) at a cost of $4.50 million gross, and goes to the public market to raise the necessary additional capital. It proposes to do this by offering $2.5 million in the form of common stock and $2 million in some form

of debt security with warrants or conversion features (it is assumed for purposes of the example that the warrants or conversion features would not be dilutive vis-a-vis savings in interest expense). In addition, UTECH, its Limited Partners and investors in the private round (2 above) participate in a secondary offering of common stock, combined with the initial public offering, in an aggregate amount of $1.5 million. Ownership of NewCo after the offering is as follows:

RC	- 9.9%
NewCo Management	- 7.5%
UTECH	- 44.4% **
Other Private Round Investors	- 18.2% **
Public Investors	- 20.0%
TOTAL	100.0%

** No adjustment for secondary sale of stock.

NOTE: No Reserve for Warrants or Conversions because they would not be dilutive.

E. Two years after the public offering (6.5 years from project inception) NewCo achieves additional market penetration in an expanded market, its sales are $37.5 million and its pre-tax profit is $5.6 million. NewCo is also paying a royalty to RC of $1,312,500 annually. If all the above were to occur, NewCo's stock would most likely be selling at fifteen times net earnings.

4. Financial Results

Based on the foregoing, we can identify the following gains to all parties:

NOTE: RC is obligated to share its position in NewCo with the university/inventor on a 60/40 basis. Thus, RC would be receiving $525,000 per year from NewCo in royalties and the university/inventor would be receiving $787,500 per year in royalties.

	Cash Investment	Ownership	Value of Equity, Assuming a Market Value of 15 Times after Tax Earnings
University/Inventor	$ -0-	5.9%	$ 2,478,000
RC	-0-	4.0%	1,680,000 *
NewCo Management	-0-	7.5%	3,165,100
UTECH	900,000	44.4%	18,633,000 +
Other Private Round Investors	750,000	18.2%	7,644,000 +
Public	2,500,000	20.0%	8,400,000
	$3,350,000	100.0%	$42,000,000

* The Special Grants Fund will receive 3.6% ($670,788) of UTECH's net long-term profit.

\+ Less any shares sold in secondary offering at time of public offering (see 4 above).

At this point in time, that is 6.5 years from inception, the options for owners of NewCo might include: "dribbling out" shares under Rule 144; selling or merging NewCo to or with a larger corporation, for stock or cash; initiating an "in-house" R&D program to develop products that would be related, at least by marketing -- recognizing the negative effects of such a program on reportable income; or purchase of new product lines from third parties, including UTECH, for stock or cash. These alternatives would also apply at earlier stages, but it is believed that the value of NewCo may be maximum somewhere between the third and fifth years of operations because of product uniqueness, "catch-up" time required by competitors, which may not yet have impacted fully, and present value principles, which may become negative as growth rates decline or plateau.

UTECH

Advisory Committee Candidates

1. Stephen Atkinson - Executive Secretary - Committee on Patents and Copyrights; Harvard University
2. Howard Bremer - Patent Counsel; Wisconsin Alumni Research Foundation (WARF)
3. Thomas Calhoun - First Vice President; E.F. Hutton
4. Roger Ditzel - Director - Patent, Copyright and Trademark Office; University of California Systems; and President of Society of University Patent Administrators (SUPA)
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