SURVEY OF INDEPENDENT INVENTORS: AN OVERVIEW

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INDEPENDENT INVENTORS: A PROFILE¹

Independent inventors are important but little-researched members of the U.S. technical community.² The survey reported on here is the first in modern times to attempt to provide a profile of the U.S. independent inventor that goes beyond a single geographical or organizational locale. The report that follows provides an overview of the demographics, practices and concerns of the modern U.S. inventor as represented by the members of leading U.S. inventor organizations. It is by no means comprehensive but seeks to be indicative of the issues raised in the survey each which will be dealt with more comprehensively in future publications.

The sample of inventors was drawn from the members of major inventor organizations in the continental United States. These

¹ I want to thank all the inventor groups who were willing to provide their mailing lists and thus made this research possible: they are listed in Appendix A. I want to give special thanks to Laura Rice, the senior research assistant on the project, whose organizational skills made the management of such complex data-gathering feasible. Thanks are also due to Yiu Kei Li, Laura Rizzardini, Orlando Tizon and Audrea Jackson for their assistance with data entry.

² For an extended treatment of why the modern-day independent inventor is worthy of a more sympathetic treatment by the technical and academic community see my "The Social Practice of Independent Inventing", Science, Technology, & Human Values, Vol. 16 No. 2, Spring 1991, 208-232.

organizations, in turn, were identified from an exhaustive survey carried out by the Department of Energy.³ In the final analysis twenty-four organizations were able and willing to co-operate with the project.⁴ These organizations were extremely diverse in both size and geographical location: the only visible biases were the likely over-representation of larger, better established organizations, and the comparative under-representation of Florida and the West Coast.

The membership lists of these organization totalled over five and a half thousand names. We drew a fifty per cent random sample of these names:⁵ in all two thousand, six hundred and eighty five inventors. We

³ See Argonne National Laboratory, Catalog of Organizations that Assist Inventors: Activities and Services, 2nd ed., Argonne, Ill., 1990. This was compiled by Martin Bernard III.

⁴ Fifty-two such organizations were listed and the project attempted to contact all of them with the request that they make their membership-lists available for the purpose of drawing a sample of inventors. We were unable to establish contact with twenty of these. Many such organizations are ephemeral, or change officers often, having no continuing public identity such as an official address or telephone number. A further six were unable to co-operate with the project because they had established policies of not revealing their membership names or address to outside bodies. While understandable, given the often hostile environment in which independent inventors often find themselves, this was unfortunate since this group included three of the larger well-established organizations, and a multi-organizational group with a concentration of members on the West Coast. While some of these groups were willing to co-operate to the extent of themselves sending questionnaires anonymously to a sample of their members, the difficulties of sample selection, follow-up mailings and reliability checking would have made the use of any responses obtained this way extremely problematic. A further two groups promised co-operation but never delivered their membership lists. This left a group of twenty-four organizations (listed in Appendix A) who were willing and able to provide their membership lists.

⁵ More precisely, we drew fifty percent of the names but included one hundred per cent of all names that were identifiably female to ensure that a large enough group of women were included in the respondents. We have separated this over-sample for further analysis at a later date.

decided on such a relatively large sample because our previous research had suggested that inventor organizations had members at very different stages of the invention process. Indeed this was an initial reason for investigating independent inventors by way of such groups rather than relying on lists of patent holders. This initial decision proved wise since, despite the large number of respondents who were at the beginning stages of their inventing careers, the sample size was large enough to include sufficient numbers of more experienced inventors for analysis.

Of the two thousand, six hundred and eighty five questionnaires initially mailed, seventy-two were sent to service providers rather than inventors; a further one hundred and thirteen were returned as undeliverable; while twenty-two inventors explicitly refused to participate in the project, usually citing reasons of privacy. Ultimately, after two follow-up letters, the second of which included another copy of the questionnaire, we received one thousand and forty three usable responses, a response rate of forty two per cent, an excellent response given the well-known privacy concerns of independent inventors.⁶

⁶ While obviously we have no exact way of knowing the extent to which respondents differ from non-respondents, a standard check of comparing late responses--the ones who responded only after the second follow-up letter--with the early ones, found no significant differences. The usual assumption is that respondent who return their questionnaires only after considerable prodding are more like non-respondents than those who eagerly and willingly respond to the first request.

What follows is an overview profile of the American inventor as revealed in the quantitative segment of the survey.⁷ Since the purpose of this report is to provide a basic outline of the research findings rather than a detailed analysis--the province of a number of more focussed papers to follow--I have chosen to present the basic outlines of the data in an accessible a manner as possible. For the same reason the findings are presented as percentages or other summary forms rather than as raw numbers, unless the data calls for more detail as, for example, where there are an unusually large number of missing responses.⁸

Demographics

Age: The average age of the respondents inventors was just over 48 yrs old. Sixteen percent were over 65 yrs. Six were less than eighteen, while three respondents were in their nineties, the oldest being 97 yrs old. Patent holders were significantly older (average age 55) than non-patent holders (46 yrs).

⁷ While inventors have a deserved reputation for protecting their privacy, often for perceived legal reasons, many inventors also feel that their voices have not been heard. Perhaps, in consequence many respondents provided extensive comments on the interviews, even going beyond the open-ended questions which were included to elicit such responses. While such comments provide a very important source of information about the American inventor, they have not been analyzed for this report.

⁸ More detailed statistics on particular topics will be available from the author by request.

Gender: Five per cent of the original population were women, though because of the over-sampling they make up nine per cent of the responses.

Ethnicity: The respondents are a predominantly white population (92%), only 4 per cent were black, 1 per cent Hispanic, and one per cent Asian. Six per cent of the inventors were foreign born.

Location: Twenty-six per cent are urban dwellers. Fifty-five per cent lived in suburban communities, while nineteen percent lived in rural areas.

Education: Fifty four per cent of the inventor respondents were at least college graduates. Five per cent had not graduated from High School, and the same percentage held a Ph.D or MD. Only amongst the latter group was there a significant difference between patent holders and others (8 per cent to 3 per cent). Fifty-four per cent of the inventors had received some form of further technical training.

Income:⁹**(a)amount**

The inventors in the sample had a mean income of \$39,000. (\$36,000 for those without patents and \$44,000 for patent holders). Seven per cent of the respondents earned less than \$10,000 per annum, and another twelve per cent earned between \$10 and \$20,000. At the other extreme of the income ladder, seven per cent of respondents earned over \$100,000, while three per cent earned over \$150,000, two thirds of them patent-holders.

(b)source

In comparison to the general population, this is a group which receives a smaller percentage of its income from being full-time employees. Only thirty-one per cent of the respondents received all their income from such a source, with another thirteen per cent receiving more than fifty per cent of their income that way. In contrast, twenty per cent received all of their income from a business unrelated to their inventing activities, while another twenty-two per cent received some of their income from that source. Twenty per cent received more than half their income from social

⁹ As is common in surveys of this kind a number of respondents were unwilling to provide information on their incomes. These figures are based on 914 completed responses to this question. There is no internal evidence in the questionnaires to suggest that non-respondents were otherwise different from the total sample.

security or other retirement pensions.

Inventing was only a very minor source of income. Eighty-four per cent received no income from inventing, including seventy-six per cent of patent-holders. Thirteen per cent received up to half their income from inventing, while only one and a half per cent earned all their income from inventing (2.4 per cent of patent holders).

Employment:

Twenty-eight percent of the inventors responding were full-time self-employed (thirty-five per cent of the patent-holders), while thirty-five were full-time employees (forty-one per cent of the patent holders). A further eleven per cent had part-time employment, three per cent were homemakers, and one per cent were students. Retirees made up eighteen per cent of the inventor respondents but twenty-four per cent of the patent holders.

At some point during their careers forty-two percent had held a job where they had been paid to manage, while twenty-two per cent had been paid to market products. Fifteen percent of respondents had been paid inventors for

their employers, a figure that rose to twenty-one per cent if the patent-holders are considered separately. Fifteen per cent (25% of the patent holders) had actually developed inventions which had been patented in their employers' names.

Careers of Invention

Inventors come in many shapes and sizes, and inventor groups in particular have a variety of members at different stages of their inventing "careers": from the new member with "just an idea" to the quasi-professional inventor with a number of patents and marketed products.

Patents:

Thirty-nine per cent of the respondents had one or more patents, with an average of 3.4. Twenty-one per cent had only one patent while fifteen per cent had between two and five. While sixty-one per cent of the respondents did not, as yet, have a patent, a quarter of these were currently in the process of applying for one.

Working models:

Many people who attend, or even belong to, inventors groups are only at the very first stage of the invention process: they have had an "idea". Twenty-three per cent of those surveyed were at this stage of the process, not yet having developed a working model of their invention.

Commercialization:

Twenty-three per cent of the inventors had one or more inventions on the market, but this figure rose to thirty-nine per cent for the patent holders. Another forty per cent were in the process of trying to market their invention (including 47% of the patent holders). On the other hand, thirty-seven percent of the inventors had never tried to market an invention, including fourteen per cent of those with a patent.

In keeping with the finding that nearly a quarter of the inventors were only at the idea stage, twenty-nine per cent of the respondents had never seriously investigated the market potential of their invention including, perhaps surprisingly, seventeen per cent of the patent holders

When asked specifically about their latest invention, twenty two per cent said they had begun attempts to commercialize it. This figure, however, conceals a wide divergence between patent-holders, thirty-two per cent of whom had tried to commercialize their latest invention, and those without patents, fifteen per cent of whom were so engaged.

Self-description:

Another way of examining the types of inventors who make up the inventor organization membership is to examine their self-descriptions. Thirty-four per cent see their inventing as a hobby (39% of those without a patent and 24% patent of patent-holders.) Fifteen per cent see inventing as their profession (10% of those without patents and 23% of those with at least one patent). Another twenty-four per cent see themselves as primarily entrepreneurial, inventors who invent primarily so they can set up a business. (26% no patent 21% patent). Still another thirteen per cent think of themselves as inventors who have simply had one idea which they would like to license but who do not see themselves as continuing to invent after that. A final fifteen per cent prefer some other

description of themselves.

Perhaps reflecting a somewhat uncertain public image of independent inventors in the modern U.S, only forty-three per cent would publicly refer to themselves as inventors. Surprisingly, the possession of a patent did not seem to make any difference to this.

Area of Invention

For a number of reasons inventors are notoriously unwilling to describe their inventions, and this is particularly the case for those in the pre-patent stage. To allow for this inventors were given the opportunity to describe their inventions in general terms as well as asking for a more specific descriptions. The following describes inventors' latest inventions in the most general terms.

Product type:

Forty two per cent were consumer products designed to be sold in stores.
Eighteen per cent were improvements or accessories to consumer products
Thirteen per cent were products designed to be sold primarily to business.
Eight per cent were inventions related to industrial processes.

Product material:

Three per cent were chemical in composition.
Seven per cent were electrical products.
Eight per cent were electronic products.
Thirty-three per cent were mechanical in nature.
Twenty-four per cent were made primarily of paper, wood or plastic.
Two per cent were software products.

Product use:

Twenty-four per cent were domestic or child-care products.
Fifteen per cent were industrial, business, professional (non-medical) or commercial equipment.
Thirteen per cent were products related to health or nutrition (including medical equipment).
Eight per cent were leisure or entertainment products.
Eight per cent was automotive equipment.
Seven per cent of the inventions were toys or games.
Six per cent were environment related.
Five per cent were educational products.
Three per cent of the inventions were agriculture-related.
Two per cent software.
One per cent was computer equipment.

Motivations for Invention

Given the likelihood of success it is apparent that the independent inventor cannot be motivated solely by the possibilities of financial success. On the other hand it is clear that, despite the odds, most inventors hold fast to the dream that their invention will make it some day and that inventing is one way to reach the dream of material success.

When asked to describe their motivations it is not surprising that American inventors own to a wide range of motivations. Though they were also asked to prioritize the two most important motivations the pattern of response did not vary from the list below which simply reflects the motivations that the inventions were willing to accept as their own.

Sixty-seven see inventing as a challenge.

Fifty-eight per cent say they enjoy inventing for its own sake.

Fifty-six invent to make money.

Forty-two per cent saw a need in their home life that they responded to.

Forty-two per cent say they simply had a chance discovery.

Thirty-nine say they responded to a need at work.

Thirty-seven claimed to be responding to a need they saw in others.

Thirty-six per cent admitted to liking the recognition that comes from inventing something.

Social Support Systems

In a previous paper I have described independent inventors as living in a "disorganized world"¹⁰ One of the prime foci of this study, then, is on the inventors' access to resources and social support.

¹⁰ See "The Social Practice of Independent Inventing" op. cit..

Resource issues:

(a)time Most independent inventors have to fit their inventing into their regular lives. Since very few are able to make a living from inventing, and even those who are retired often have other commitments, there is considerable variation in the amount of time that inventors can spend on their inventing. Half, in fact, spend less than three hours per week on their inventing. Indeed other evidence from the questionnaires suggests that for most of these inventing is a sporadic rather than routine activity. Even for those with a patent, forty per cent spend less than three hours per week inventing. Another twenty-eight per cent claim to spend between three and ten hours per week on their inventing, while a further twelve per cent manage between eleven and twenty hours per week. Only ten per cent (fifteen per cent of patent-holders) spend more than twenty hours per week inventing.

Not surprisingly given their other activities seventy-one per cent claim not to have as much time as they would wish to work on their inventions. For most (67 %) it is work that gets in the way. For a further sixteen per cent it is child-

care and domestic responsibilities which limit invention time (perhaps surprisingly there is little gender-difference in this). The remainder offer a variety of time constraints.

When they are able to work on their inventing, sixty-nine per cent work on one invention at a time, while the remainder have multiple projects in operation at the same time.

(b)space Only 25% found lack of space a problem, perhaps confirming the stereotype that the American basement and garage are important contributors to the nation's inventing activities!

(c)money

(i) spending money:

Money, of course, was a critical issue for all of the inventors. Going beyond the idea stage is expensive and the expenses increase as one proceeds from idea to working model, to patent, to license, or, most expensively, to a business.

The amounts reported usually tracked the inventors' position in the invention cycle. Of the over eighty per cent of respondents who were willing to discuss how much they had spent on their last completed invention twenty-nine per cent had spent less than \$100; twenty-four per cent had spent between \$100 and a \$1000. These were most often inventors who had not proceeded beyond the idea stage. A further twenty-six per cent had spent between \$1000 and \$5000, while ten per cent had already spent between \$5000 and \$10,000. Nearly one per cent (six inventors in all) had spent over \$250,000 on their latest invention.

(ii) making money:

These are not insubstantial figures given the seeming unprofitability of inventing. Only nineteen per cent admitted to receiving any revenue at all from any invention, though this is twenty-eight per cent of those with patents. A still fewer ten per cent have found inventing profitable overall, and only eighteen per cent have ever had even a single invention that has been profitable (though this rises to twenty-nine per cent when patent-holders are considered separately). Only four per cent receive fifty per cent or

more of their yearly income from inventing.

(iii) raising money:

Given this pattern of expenditures and earnings, raising money is a major concern, and for the typical inventor this means the expenditure of his or her own funds. Seventy-one per cent raised all the money for their last invention from personal income or savings, and only twenty-one per cent raised fifty per cent or less from personal savings,

Fifteen per cent raised some money from family or friends, with four per cent raising fifty per cent or more from such sources. Few inventors, less than five per cent, raised any more at all from commercial loans or investments, and only two and a half per cent raised more than half from such sources.

Similarly only five per cent raised any money from government grants or loans while only two per cent raised fifty per cent or more from such sources. Ten per cent raised money from a variety of other sources.

Family support:

If money was generally in short supply, personal interviews had suggested that social and emotional support from a circle of family and friends was of critical importance. To a certain extent this was born out by the survey. For those for whom such support was available, it was clearly very important, often eliciting a variety of unsolicited comments to this respect. Inventors, however, seem to persist even when lacking such support.

Only sixty-five per cent of those for whom the question was relevant felt supported by their spouse.¹¹ Only fifty-seven per cent felt supported by their children, the same number as felt supported by their parents. Slightly less (fifty-two per cent) felt supported by their other relatives, but sixty-one per cent enjoyed the support for friends.

Nonetheless forty-four per cent claimed to have someone else in the family who was interested in inventing, fifteen per cent having other family members who held patents.

¹¹ Seventy per cent of the inventors were married, four per cent widowed, twelve per cent divorced, and fifteen per cent single.

Inventor support:

Independent inventing is a largely individual activity, far removed from the team orientation of the modern R&D laboratory. Eighty-three per cent of the inventors work alone. Only seven per cent have co-inventors and a further ten per cent have some kind of assistance. Given this isolation, and the fact that the sample is drawn from the membership of inventor organizations, it is perhaps surprising that only fifty-seven per cent discuss any part of their work with other inventors, but the sometimes exaggerated need for secrecy to protect patent rights casts a powerful spell. Twenty-nine per cent give this as the reason for not discussing their work with other inventors. Fourteen per cent claim not to know any other inventors and a further nineteen per cent claim that other inventors don't have the information they need. When they do discuss their interests with other inventors, the most common topic of discussion is marketing (41%) and the least common, financial information (26%)

Sources of information:

Nonetheless inventors draw on a wide variety of information sources to help them with their work. The following information sources were all mentioned by inventors (the percentage seeing the information source as one of two most important is indicated in parentheses)

-inventors organizations,	55 %	(28 %)
-books,	54 %	(25 %)
-industry,	45 %	(20 %)
-other inventors	39 %	(16 %)
-magazines,	35 %	(9 %)
-patents,	22 %	(6 %)
-universities,	21 %	(7 %)
-professional associations,	20 %	(4 %)
-television,	13 %	(3 %)
-government,	13 %	(2.5 %)

Dealings with university and government:

In all, twenty-six per cent of inventors had applied for university or government assistance, with a significantly higher percentage of patent-holders (35 %) having done so than non-patent holders (20 %).

17 % wanted technical assistance
21 % wanted marketing assistance
42 % wanted financial assistance
4 % wanted assistance with protection
16 % wanted some other kind of help

Most (54 %) were not satisfied with the help they received.

Not surprisingly, though, more were satisfied with the technical (59%) and protection information (62%) they received than they were with the financial help (36%).

Inventor Organizations:

Although the survey was sent only to names drawn from the membership lists of inventor organizations, criteria for inclusion in such lists varied widely among the organizations: from those who maintained names only of those who had paid their most recent membership dues, to those whose list also included inventors who had simply sought help from the club. It is not surprising, therefore, that only eighty-six per cent of respondents claimed to be members of an inventor organization, and that of these, thirty-two per cent said they never attended meetings. Thirty-three per cent, however, claimed to attend meetings of their organization at least once a month.

No strong pattern emerged in the reasons given for belonging to an inventors' organization. Around fifty per cent of respondents mentioned technical assistance, marketing and protection advice, and the sharing of ideas

as reasons for belonging. Slightly more (59%) mentioned socializing opportunities with other inventors; slightly less (30%) mentioned financial assistance. Nearly three-quarters of the members (74%) were satisfied with the services of their organization.

Marketing Firms:

Commercial marketing firms have made an aggressive push to market their services to independent inventors. In doing so they have been widely characterized as "scams" for supposedly charging much more than they were able to deliver.

Only a third of the respondents had actually contacted such a commercial marketing firm (43% of those with a patent), and still fewer, seventeen per cent had paid any money to such firms. Forty-two per cent of the latter had paid less than \$500, and a further thirty-five per cent had spent less than \$3,000. Twelve per cent, however, had spent over \$5000 with such firms.

Over three-quarters (78%) were not satisfied with the

service provided. This satisfaction level did not show any correlation with the money spent on such firms. Both those who spent less than \$500 and those who spent over \$5,000 showed a twenty-nine per cent satisfaction rating.

Relationship with Patent System

The patent system provides a critical step for most inventors who wish to transform their ideas into property rights. There are certain exceptions to this in industries where novelty and speed of innovation is more important than long-term protection but, by and large, patenting is necessary for inventors to even begin the licensing process. Nonetheless inventors are not entirely happy with the patent system.

Patent Plans:

Only sixty-one per cent plan to patent their latest invention.

There was, however, a significant difference between those who already held a patent of whom seventy-four per cent planned to patent their next invention, and those without one, of whom only fifty-two per cent planned to do so.

A number of reasons were advanced for not patenting:

- 41% said that fees are too high.
- 18% said they are not sure their invention has a commercial application,
- 22% said they were not ready enough to make plans.
- 26% give a series of other reasons, most commonly that patenting was not the norm in their particular industry.

Looking at the issue more positively, inventors gave a number of reasons as to why patenting was desirable. The figure in parenthesis indicates the percentage of respondents who thought that reason was one of the two most important reasons for patenting.

-Making money.	68%	(31%)
-Prevent others making money.	58%	(26%)
-Proving worth of inventive activity to myself.	29%	(6%)
-Proving worth to others.	28%	(5%)
-To assist application for development funding.	27%	(7%)
-To see if invention was worthwhile.	16%	(2%)
-Informing public of invention.	27%	(3%)

Lawyers:

Despite much negative folklore, seventy-four per cent of all respondents had dealt with a patent lawyer or agent and seventy-five per cent of those were satisfied with the relationship.

Commercialization

Very few inventors invent for its own sake. Even those who invent for the challenge or the recognition see getting their invention on the market as an important goal. Achieving that end is somewhat more problematic. Inventors have two main routes to commercialization. The first is to license the invention to a manufacturer and distributor who has the resources to get the product into the hands of the consumer. The second is to set up ones own business to manufacture and distribute the product oneself, to become an entrepreneur. Inventor organizations themselves split on the advice they give to inventors, with some strongly suggesting licensing as the preferred route, and others equally strongly suggesting the entrepreneurial path.

Routes to market:

The inventors in this sample, however, preferred seeking the entrepreneurial route by a margin of two to one, with the remainder pursuing mixed strategies. Fifty eight percent said they would seek to commercialize their latest invention by trying to set up their own company, while only twenty-six per cent said they would be pursuing the licensing route.

If we look at overall experience rather than simply the last invention, then thirty per cent of the respondents had started at least one company to market their inventions, this included forty-two per cent of those who already held at least one patent. Of these eighty-five per cent still had one or more companies in existence.

Attitudes to licensing:

Perhaps one reason for the preference for setting up ones own business lies in the strongly negative attitudes that inventors have towards the manufacturers who would be the potential licensees of their inventions:

40% agree, or strongly agree, that manufacturers are not interested in outside inventors.

44% agree, or strongly agree, that manufacturers are often willing to steal inventors ideas.

In contrast only:

37% agree, or strongly agree, that manufacturers will license a good idea with commercial potential.

12% agree, or strongly agree, that manufacturers actively seek out good ideas from outside.

Not all blame is attached to manufactures, however, since:

72% agree or strongly agree with the perception that inventors often do not know how to present themselves properly to manufacturers.

Attitudes to entrepreneurship:

The idea that much of the interest in setting up a business is the result of a negative sense of the possibilities of licensing is reinforced when we look at attitudes towards entrepreneurship.

Only twenty-three per cent agree or strongly agree with comment that starting your own business is necessary to make money from an invention, while forty-one per cent disagree or strongly disagree with the idea.

Similarly only thirty-nine per cent agree that running your own business is the only way to control ones own destiny, and only the same percentage would want to run their own business even if they could license their invention. Conversely sixty-three per cent think running own business involves skills inventors don't have.

Trials and Tribulations

In an attempt to assess the areas where inventors themselves felt they experienced the most difficulties and needed the most help, a series of questions was asked which targeted the various stages in the innovation process:

Inventing:

When asked about the difficulties they faced in developing their inventions to the working model or prototype stage the following problems were mentioned (the per cent of those considering this one of the two most difficult problems are noted in parentheses). Money, once again, is the most important problem.

Access to raw material.	32%	(8%)
Access to necessary equipment.	34%	(8%)
Acquiring the technical skills to build model.	26%	(6%)
Solving technical problems in getting it to work.	28%	(10%)
Knowledge of, or access to, a model-builder.	33%	(12%)
Finance for building a model.	43%	(21%)

Making money:

When asked about the prime sources of difficulties in making money from their invention, there was a similar variety of responses.

Cost of patenting.	53%	(26%)
Complexity of patent system.	34%	(9%)
Lack of cooperation from patent office.	7%	(1%)
Lack of co-operation from lawyers.	6%	(1%)
Failure to be granted patent.	5%	(0%)
Potential disputes over ownership.	5%	(1%)
Inadequacies of invention.	10%	(3%)
Poor marketing skills.	41%	(18%)
Manufacturing too costly for market.	22%	(8%)
Problems associated with scaling-up.	18%	(6%)
Manufacturers not interested in products.	32%	(15%)
Manufacturers won't do fair deal with inventors.	18%	(5%)
Lack of funds to prove potential.	52%	(25%)

Innovation:

Finally, when asked to assess the major obstacles in the way of their inventing activities, inventors responded as follows: (Percentages citing this as "most important" in parentheses).

Lack of capital.	71%	(48%)
Marketing.	61%	(30%)
Lack of time.	52%	(28%)
Lack of knowledge.	35%	(12%)
Lack of facilities.	27%	(6%)
Legal problems.	16%	(3%)
No opportunity to consult with others.	13%	(2%)
Lack of family support.	11%	(3%)

CONCLUSION

Clearly such a bald summary only provides an introduction to the material available in the survey, but it does suggest the variety and depth that exists in the American independent inventor community. Further reports from the project will explore dimensions of this material in greater depth.

Appendix A.

LIST OF INVENTOR ORGANIZATIONS SAMPLED

American Society of Inventors, Philadelphia
Colorado Inventors Association
Houston Inventors Association
Indianapolis Inventors Association
Intermountain Society of Inventors and Designers
Inventors Association of Connecticut
Inventors Association of Georgia
Inventors Association of New England
Inventors Association of St. Louis
Inventors Club of Greater Cleveland
Inventors Council of Michigan
The Inventors' Council (Chicago)
Kansas Association of Inventors
Kearney (Nebraska) Inventors Association
Inventors Network of Columbus
New York Society of Professional Inventors
Nevada Inventors' Association
Northwestern Inventors Council, Erie PA
Oklahoma Inventors Congress
Rocky Mountain Inventors Congress
Society of Minnesota Inventors
Society of Mississippi Inventors
Tampa Bay Inventors' Council
The Inventors and Entrepreneurs Society of Indiana

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