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FIRST REPORT OF THE  
MINNESOTA STATE  
BOARD OF INVENTION

TO THE OFFICE OF  
THE GOVERNOR AND  
THE MINNESOTA LEGISLATURE

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Something we were withholding made us weak  
Until we found it was ourselves  
We were withholding from our land of living,  
And forthwith found salvation in surrender.  
Such as we were we gave ourselves outright...

Robert Frost, The Gift Outright

PROLOGUE

The Moral Imperative and Vision of the Minventia Project

Invention and innovation have been and continue to be remarkably significant but curiously unsung contributors to the state's economic and social development. For example, for countless years, state/national/international commercial inventions/innovations have played a major role in creating: (a) individual and family wealth, power and influence; (b) private sector capital and corporate success/prestige, e.g., 3M, Honeywell Inc.; c) family, independent, corporate and community foundation resources; (d) tax revenues for municipal, county, state and Federal governments; and (e) a higher quality of life for the general citizenry.

Yet never before has such human productivity done so much for so long for so many beneficiaries with so little reciprocal recognition and resource support. It is morally long overdue and practically most timely to correct that historic oversight. In the interests of all Minnesotans and beyond, we now must institutionalize and thus more systematically support invention and innovation, thereby strengthening and ensuring its rightful place in our society. Then we can better organize to encourage, nurture, replenish, reward, mine, harness and target much needed inventive citizenship. By so doing, we reactivate one of the demonstrated major sources of Minnesota's past and present strength. And we also help ensure the state's future continuous self-renewal, to its incalculable national and international advantage.

Excerpt from  
Toward Minnesota As The Global Invention/Innovation Center

by

Daniel A. Ferber, Council Member

Founding Chairman and CEO

Institute for Invention and Innovation (3I)

for

The Governor's Council on Entrepreneurship and Innovation

November 1, 1984

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I. Spirit, philosophy, vision and objectives toward Minnesota as the global invention capitol (Minventia)

The increasing national level of negativism and cynicism combined with the decreasing level of optimism and hope require new initiatives to combat the former and rekindle the latter. To that end, almost twenty years after celebrating its Bicentennial, the United States needs a unifying vision so that a new Spirit of '76 (Appendix A) can be invented/infixed/implemented by its citizenry.

One such emerging vision is based upon the philosophical assumption that the human condition is at its best when its yet underutilized and underestimated inventive capability is encouraged, nurtured, rewarded, mined, harnessed and then focused upon solving significant socio/economic problems. The stimulation of that now-relatively dormant human asset requires reinforcing cultural values, social policies and support systems. When they are in place, a quantum increase in such an inventive, positive expression of individual/community self-fulfillment/self-renewal is more likely to occur. Such a constructive citizen attitude and behavior pattern would be a refreshing alternative indeed to the easier but irresponsible/destructive criticism currently so pervasive.

In this context Minnesota, acting a second time as a voluntary national laboratory (Inventive Federalism, Appendix B), is developing a comprehensive, integrated invention/innovation support/marketing system, by design a nationally-replicable infrastructure, toward a prototype model of an "inventive society" (Minventia, Appendix C). Minventia's conceptual vision required the architectural evolution and construction of two basic organizational mechanisms: (a) the Minnesota State Board of Invention (1993), an integrated internal companion to (b) the earlier (1980) external, internationally-oriented Institute for Invention/Innovation (3I).

GENERAL OBJECTIVES OF 3I/THE MINNESOTA BOARD OF INVENTION:  
TOWARD  
A NATIONAL/INTERNATIONAL "INVENTIVE SOCIETY" MODEL,  
MINVENTIA

POLICY OBJECTIVE. To give invention/innovation activity its long overdue and proper place in Minnesota social policy commitments. For example, that activity has played a major historic role in producing the financial resources now used to fund all state programs while providing substantial revenues for our private and independent sector organizations.

STRUCTURAL OBJECTIVE. To institutionalize a necessarily flexible and semi-independent mechanism, the Minnesota Board of Invention, funded by the public-private and independent sectors, to lead and coordinate a eight year (1993-2001) development of a prototype comprehensive, integrated "invention and innovation support and marketing system." Such a system is essential for sustained continuity and broader citizen participation toward Minnesota's ability to "invent" more of its own future.

FUNCTIONAL OBJECTIVE. To coordinate, before the fact, through such a stronger, single-voice mechanism, the predictable and already emerging proliferation of competing programs which typically will follow the current and ever-increasing state/national/international attention to invention and innovation activity.

ILLUSTRATIVE PAY-OFFS. To provide an enlightened self-interest opportunity for Minnesota to lead, not follow, such an anticipated invention/innovation thrust by: (1) providing the infrastructure through which Minnesota, acting as a national/international laboratory for all, can build its own internal "comprehensive, integrated invention/innovation support and marketing system," while (2) connecting that same infrastructure to mutual advantage with a transcendent "Minnesota-based U.S./international technology acquisition and transfer system," led by the 501 (c)(3) non-profit Institute for Invention and Innovation (3I).

To acquire a special set of national benefits for Minnesota, so acting as such a prototype national/international laboratory, to solve what has been called "the U.S. invention and innovation recession." For Minnesota then can diffuse that solution throughout the remaining states while simultaneously stimulating them similarly to share the country's leadership burden through such a decentralized focus on other national issues/problems, i.e., it will have demonstrated for a second time the concept of Inventive Federalism, a Federal/state intergovernmental process innovation with its parallel international governance implications.

To position Minnesota, through the preceding initiatives and accompanied by a coalition of cooperating states/countries, as a serious candidate for the Nobel Peace Prize (awarded by the Norwegian Parliament) in the year 2001, the 100th birthday of that uniquely prestigious and pertinent award. For Minnesota, and its in-state participants, thereby would acquire incalculable goodwill (and resultant, long-term competitive advantages) which indefinitely then would place all Minnesota parties in a class by themselves within the global community.

## II. Evolution of the Minnesota State Board of Invention:

General Goal: To organize Minnesota (via the Minnesota Board of Invention/Institute for Invention and Innovation) by 2001 A.D. as the global invention capitol (Minventia). To do so is in the state's enlightened self-interest, e.g., part of the competitive theory/ strategic rationale is reflected in John Brandl's article, "Winning Through Innovation," (Appendix D).

### Historic building blocks in the evolution of the Minventia Project

Note: The fifteen year "sole source" effort, which both preceded and prompted the following 1985 and subsequent MN invention legislation, will not appear in this first report. But it will be reported/documented elsewhere in due course.

- (a) 1971. The Commission on Minnesota's Future was imported from Hawaii and modified to create the necessary social climate;:
  - to focus on long term as well as short term problems and opportunities. The biennial legislative Horizons program is the ongoing expression of that earlier Commission;
  - to suggest that Minnesota better organize itself to invent solutions systematically for such problems and opportunities, i.e., a continuous self-renewal strategy for the state, thereby permitting Minnesota to invent far more of its future than heretofore had been considered possible.
- (b) 1975. The requisite social invention and first phase of the Minventia project, inter-generational education/lifelong learning (Appendix E), was strongly endorsed as an official project of the Minnesota American Revolution Bicentennial Commission, chaired by then-Lt. Governor Perpich.
- (c) 1984 The Governor's Council on Entrepreneurship and Innovation, chaired by Carol Pine, including then-Representative Phil Riveness and now-Senator Tracy Beckman, recommended to Governor Perpich the early elements of "a comprehensive, integrated invention and innovation support and marketing system," again the infrastructure of Minventia, and an appropriation of \$811,500 for its implementation.
- (d) 1985 and 1986. The first public policy "invention" legislation in Minnesota's history, albeit badly abused, was introduced (S.F. 876/H.F. 976). The initial focus was on expanding services primarily for independent inventors toward a much more comprehensive, integrated and authentically Minnesota invention and innovation support/marketing system. That legislation passed out of the Economic Development and Commerce Committees in both houses, in both years, with a recommended appropriation of \$958,500. See also the 1987 and 1988 successor bills (H.F. 1380/S.F. 468), 1989 and 1990 (H.F. 2720/S.F. 2303) and those of 1991 and 1992 (S.F. 307/H.F.464)

- (e) 1987. A \$100,000 state appropriation and implementing contract was awarded, via DTED, to the "sole source" Institute for Invention and Innovation (3I):

"for the study and design of a comprehensive, integrated invention and innovation support and marketing system. The study must examine the feasibility of locating an invention and innovation center in the Twin Cities metropolitan area, with a statewide network involving Twin Cities' suburban and greater Minnesota communities. The design must include an educational component to encourage greater interest in innovative and inventive methods. It must also provide proposals for linking Minnesota-based invention and innovation activities with similar efforts occurring nationally and internationally." 1988 Minnesota Laws, Chapter 686, Article 1, Section 14(h).

The results of the study clearly demonstrated the need and desire for a much more sophisticated/advanced and "comprehensive, integrated invention/innovation support/marketing system," implemented by a Minnesota Board of Invention, appointed by the Governor with the advice/consent of the Senate, as originally expressed by S. F. 307/H.F.464. DTED submitted multiple copies of its and the study consultant's respective final reports to the Legislative Library and designated legislative committee chairs.

- (f) 1993. It remained for the 1993 legislature, via S.F. 489 and H.F. 1177, finally to establish the Minnesota Board of Invention (Appendix F).

Summary. An orderly, twenty year process of social inventing, "living out" (inventrepreneurship), studying and then designing a "comprehensive, integrated invention and innovation support and marketing system" has resulted in the bipartisan 1993 bill originally drafted by Senator Roger Moe. That bill (again S.F. 489 and H.F. 1177) established the Minnesota Board of Invention, with its openly publicized 8-10 year timetable, to develop that component of Minventia which falls within the state's borders.

Moreover, since 1980, the MN-based 501(c)(3), non-profit Institute for Invention and Innovation (3I) simultaneously has been developing an integrated but national invention/innovation (market-driven) global search process outside MN borders (Appendix G), paralleling a similar, 50 year-old successful Japanese effort.

Hence MBI (state) and 3I (national/international) comprise the two basic organizational structures undergirding/supporting Minventia.



III. Review of existing Minnesota invention/innovation activities:  
"connecting the dots" toward an effective "critical mass."

According to subdivision 6 [Report] in its enabling legislation, the Board of Invention's report to the Governor and the legislature "must include a review of invention activities in the state." Such activities have been reviewed as evidenced both (a) in the Board's review of its own activities (see Section IV) and (b) in the individually submitted summaries of those activities, listed as follows and detailed later in the same order (see Appendix H).

- A. Support services for a new idea and a resultant small company: the Robodyne Corporation case study (Joseph Alvit )
- B. Inventors and Designers Education Association (Bill Baker)
- C. Minnesota Inventors Congress (Penny Becker)
- D. Inventors Club of Minnesota/I T & T Society (Ruth Bernstein)
- E. Minnesota Inventors Hall of Fame/U of M Office of Research/Technology Transfer Administration (Henry Buchwald)
- F. Inventions and inventors: the NordicTrack Inc. case study (Weston Cutter)
- G. Minnesota intellectual property law overview (Phil Goldman)
- H. MN small business development center overview (Jack Hawk)
- I. Northwestern Minnesota invention activities (Steve Levinson)
- J. Revitalizing the inner-cities of Mpls./St. Paul through invention-driven, job creation partnerships (Luther Prince)
- K. Precollegiate (grades 4-9) Young Inventors Fair and its prerequisite educational program components (Janet Robb)
- L. Large corporate R&D Programs: a 3M case study (Patsy Sherman)
- M. Northeastern Minnesota invention activities (Milt Toratti)

#### IV. Review of Minnesota Board of Invention Activities

According to subdivision 6 [Report] in its enabling legislation the Board of Invention must include in that its report "a review of the Board's activities." Those activities are best described in/by its agendas which follow for its first four meetings to date.

It should be noted that the Board of Invention has no funding as of yet. Hence there can be no "listing of grants made under the invention grant program." Nor in its brief four month lifespan has the Board been able to do "an evaluation of invention activities," especially without budget or staff. The Board, however, will identify/prioritize possible "recommendations concerning state support of invention activities" which it will submit to the Governor and the 1995 legislature. The initial but yet to be prioritized listing of those recommendations immediately follow in Section V. Others may be added in due course prior to 12/1/94.

- V. Initial proposals to be considered/prioritized by the Board of Invention by December 1, 1994 as possible recommendations to the Governor and the 1995 Legislature for FY 1996/1997. The final 1995 recommendations will constitute Phase I of the Minventia infrastructure in the latter's 8-10 year timetable. To paraphrase/parallel the film, Field of Dreams, "if we (Minnesotans) build it (Minventia), they (inventions/inventors, both domestic and international) will come."
- A. A funding/staffing proposal for the Board of Invention, including public sector/state regional funding where none yet exists, i.e., Twin Cities, NE, NW, and SE MN
- B. The history and impact of invention in Minnesota: a 12/94-1/95 publication (Pine & Partners), integrated with an international/national symposium/exhibit, ideally in concert with the Smithsonian Institution, the Office of the Governor/the 1995 legislative Horizons program.
- C. Development of precollegiate (K-12), postsecondary and lifelong learning curricula for and about citizen inventive behavior, via both faculty/teacher and curriculum development grants, in collaboration with the Department of Education and the Higher Education Coordinating Board, respectively
- D. A planning/development physical plant blueprint: (1) a 3I/MBI international, invitational invention think tank and conference center (e.g., Spring Hill Center); (2) Minnesota version of the Washington DC "Blair House", i.e., a 3I philanthropically-donated/ endowed estate and residence to host and recruit interested/relevant foreign inventors [e.g., on/about Lake Minnetonka (for the U.S./MN) and the Musser estate in Little Falls, MN (for the NW MN region)].
- E. Invention and the electronic/print media, e.g., the use of statewide telecommunication systems, cable/network TV, newspapers/magazines to stimulate interest in and distribute information about "inventiveness"-toward an ultimate Minnesota mind-set/coping skill in dealing with problem-solving of all kinds, i.e., Minnesota as an operational model of an "inventive society."
- F. A Twin Cities-based international Inventors Hall of Fame Museum, ideally in collaboration with the National Inventors Hall of Fame (Akron, Ohio), with accompanying cross-cultural programming, e.g., seminars, conventions, trade shows and young inventor summer camps

- G. A (1) MN-based, independent Invention Foundation and (2) National Endowment for Invention paralleling the National Endowments for both the Arts and Humanities
- H. An international research center, public-private-independent sector sponsored, focused upon both theory and practice toward accelerating increased inventive/innovative human behavior
- I. Evaluation processes/procedures regarding Minnesota invention activities
- J. An ongoing international/national survey, analysis and monitoring of highly regarded/successful invention support systems so as to continuously renew the MN model
- K. Non-traditional invention support sites, e.g., correctional institutions, churches, other non-profits
- L. Software for interactive, computer-assisted learning and other "appropriate technologies" designed to enhance inventive behavior
- M. A prototype invention data/information bank to connect all global inventor/invention communities/networks for purposes of "team invention" and one-to-one discourse. Such an initiative may well be integrated with and thus facilitated by the emerging, electronic "information superhighway" promoted by Vice President Gore toward more effective/accelerated invention/innovation diffusion
- N. An analysis of both obstacles/incentives affecting the private sector's concern about releasing seemingly unused technologies for external utilization
- I. An exploration with the Walt Disney Company to collaborate with Minnesota in building an international theme park within the state, perhaps called "Inventia."

## EPILOGUE

"I see every reason to believe that American inventiveness will now take wing again.... But the inventiveness of American technology is only one reflection of the inventiveness of the American spirit. The nation that believes that it made itself anew can be true to itself only by trying to make everything anew.... It is this spirit that will now energize its politics.... I am growing more and more convinced that what we are observing is the preparation for another burst of inventiveness.... For there is something peculiarly American in what is happening. The activity is local. The experiment with new forms is coming from the bottom. The new institutions are being fashioned by no less than "We, the People." So one can trace what I believe to be the ferment in America into every corner of the society. The ferment is not violent as it was a decade ago, but in many ways it is no less revolutionary...too much is going on, too much that is new, and it will not be contained. It will find its expressions.... Americans also want to be American again. It is they who want a return of their inventiveness, to perform for them again the miracles it has performed before."

Henry Fairlee, British journalist  
November 16, 1980 St. Paul Pioneer Press,  
excerpted from the Washington Post