Research Spending & Results

Award Detail

Awardee:	ENCLAVIX, LLC
Doing Business As Name:	Enclavix, LLC
PD/PI:	Nicole T Davis (801) 550-6642 venturewrench@gmail.com
Award Date:	12/11/2013
Estimated Total Award Amount:	$ 150,000
Funds Obligated to Date:	$ 150,000 FY 2014=$150,000
Start Date:	01/01/2014
End Date:	12/31/2014
Transaction Type:	Grant
Agency:	NSF
Awarding Agency Code:	4900
Funding Agency Code:	4900
CFDA Number:	47.041
Primary Program Source:	040100 NSF RESEARCH & RELATED ACTIVIT
Award Title or Description:	SBIR Phase I: Project to Create a Machine Intelligence-based System for Innovative Organizations to Assess, Manage and License Intellectual Property
Federal Award ID Number:	1345662
DUNS ID:	145301979
Program:	SMALL BUSINESS PHASE I
Program Officer:	Glenn H. Larsen (703) 292-4607 glarsen@nsf.gov

Awardee Location

Street:	4249 Foothill Drive
City:	Bountiful
State:	UT
ZIP:	84010-6041
County:	Bountiful
Country:	US
Awardee Cong. District:	02

Primary Place of Performance

Organization Name:	Enclavix, LLC
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Abstract at Time of Award

This SBIR Phase I project proposes to help unleash America's stock of intellectual property, converting ideas into products, services and therapies to benefit humanity. Using advanced machine-intelligence techniques, semantic-networking technologies and semantic-based visualization to extract meaning and context from the current, relatively unstructured data set of issued patents stands to significantly enhance the nation's understanding of intellectual property that has been developed and, importantly, the relationships between patents and instances of newly-developed intellectual property. The proposed system could help identify other areas of innovation as well as areas where innovations have been underutilized. The stock of underutilized IP in America, and around the world, represents a significant loss of value to society. The system will also help to fuel future innovations by identifying open areas for innovation. An important benefit of the system is to make more widely known the opportunities for Federally funded, university-developed technologies to be licensed and put to use.

The broader/commercial impact of this project will be to enhance Innovation in America. Spending on R&D and patent protection is significant and growing. Global annual R&D spending totaled over $1.333 Trillion in 2011 and annual U.S. spending on R&D was roughly 32% of the global total at $427 billion and is estimated at $436 billion for 2012. Innovative organizations investing in R&D invest roughly 3-4% of their R&D budget on patent expenses to protect that IP with an estimated U.S. IP expenditure of $17.44 billion in 2012. As part of this total, approximately 10% or $1.74B will be spent on the IP Information category that covers information about intellectual property. Of this category, an estimated 20% of the IP Information budget will be spent with Online IP Services, accessed specifically online, up from approximately 5% in 2003, resulting in a target market of $348.8 million for Online IP Services tools in 2012. This project, by enabling innovative organizations to visualize the context and competitive landscape of their intellectual property, will enable better choices and make it easier for IP to be licensed to enhance innovation in America.

Project Outcomes Report

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Innovation is a key foundation to economic growth in the 21st century, allowing for entrepreneurial growth, the reinvention of existing organizations and solving real world problems with significant impacts on humanity. However, much innovation that occurs, particularly in the form of patents, sits unused or underutilized, because organizations don't understand the impact of their IP, or because the IP is not matched with the appropriate business partners. The vision of this project is to create tools to help better use intellectual property.

During this project, the team developed an early prototype of a system to help innovative organizations make better use of their patents and enhance the use of intellectual property. The system, when completed, will be an online software-as-a-service system which uses natural language processing, machine intelligence and advanced visualization to enable innovative organizations to assess, pre-assess, manage and market their intellectual property. The goal of the system is to help innovative organizations, including businesses, universities and entrepreneurial inventors, to accelerate America's Innovation Engine. The prototype system is designed to allow innovative organizations to understand and better manage their current patent portfolio in the context of the universe of patents. This project yielded two key innovations, including a sophisticated natural language processing system for characterizing patents. This project also led to the development of a machine intelligence system to help reveal connections between patents. The team developing the machine intelligence system worked to solve problems on the outer edge of complexity currently addressed by machine intelligence research. In addition, the University of Utah SCI team created a dynamic visualization system to help clients gain insights into their intellectual property.

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Modified by: Nicole T Davis

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