



GLOBAL MANAGED NETWORK FOR TECHNOLOGY TRANSFER

MAY 7, 2013

PREPARED FOR: GLOBALIZATION OF TECHNOLOGY TRANSFER CONFERENCE, BEIJING, CHINA

Andy Zynga, CEO, NineSigma, Inc.



NINESIGMA[®]

NINESIGMA OVERVIEW & RELEVANT ASSETS



OFFICES IN USA, EUROPE, JAPAN,
AUSTRALIA, KOREA AND CANADA



37,000 + PROPOSALS
RECEIVED FROM 116 COUNTRIES



2,500 + OPEN INNOVATION
PROJECTS COMPLETED



DIVERSE CLIENTS
MULTINATIONALS, MIDDLE MARKET,
NON-PROFIT, GOVERNMENT



2 MILLION + SOLUTION
PROVIDERS CONTACTED



PROGRAM MANAGER EXPERIENCE:
28 YEARS AVERAGE INDUSTRY
EXPERTISE, 150 PROJECTS MANAGED



600 + CLIENT RELATIONSHIPS



EXPERIENCED SEARCH TEAMS

NineSights® **REPOSITORY** OF NEEDS | **REPOSITORY** OF TECHNOLOGIES

A SAMPLE OF OUR CLIENTS



PROGRAM DELIVERY IN:

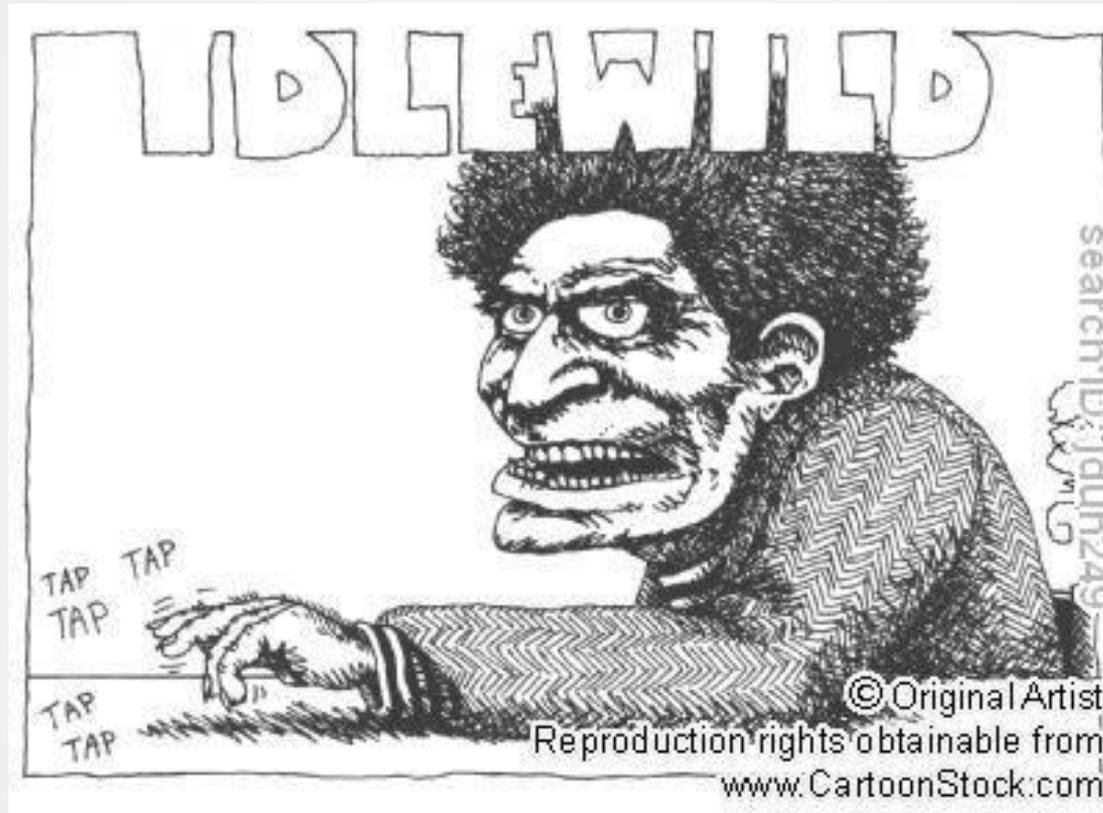
North America • Brazil • South Africa • Europe • Japan • Korea • Australia

OPEN INNOVATION

THE PROCESS OF GOING OUTSIDE
YOUR COMPANY'S FOUR WALLS
(OR YOUR INDUSTRY) TO FIND OR
PROVIDE NEW CONCEPTS,
TALENTS AND TECHNOLOGIES. 

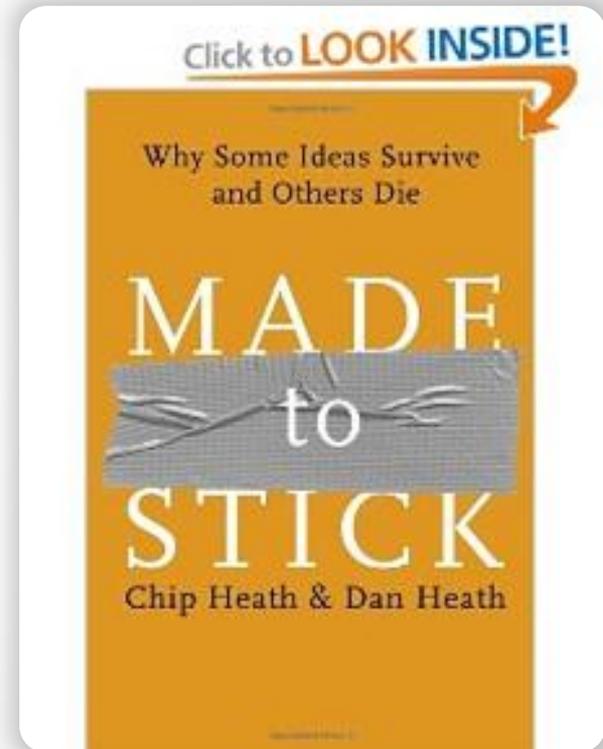
The common tendency of filtering input and output through one's own likes, dislikes, and experiences to acquire, retain, and process information.

ELIZABETH NEWTON*: TAPPING AND RECOGNIZING MELODIES



*Overconfidence in the communication of intent:
Heard and Unheard Melodies. Elizabeth Newton, Ph.D. Thesis, Stanford, 1990

*“Here’s the great cruelty of the **Curse of Knowledge**: The better we get at generating great ideas—new insights and novel solutions—in our field of expertise, the more **unnatural** it becomes for us to communicate those ideas clearly”*



KARL DUNCKER



CREATOR OF THE “CANDLE EXPERIMENT”

THE CANDLE EXPERIMENT*



*KARL DUNCKER, 1945

NOT THE RIGHT SOLUTION...



THIS IS THE SIMPLEST WAY...



COGNITIVE BIAS 2: FUNCTIONAL FIXEDNESS



A FEW KEY FACTS TO SET THE SCENE

- 2,500 Technology Searches (Outside-in Open Innovation)
- Dozens of Technology license searches (Inside-out Open Innovation)
- ❖ **MOST OF OUR CLIENTS (more than 90%) ARE LARGE MULTINATIONAL BUSINESSES**
- ❖ **KEY INSIGHT:**
A Network and a Platform are NOT enough!

7 INGREDIENTS FOR SUCCESSFUL TECHNOLOGY TRANSFER TO INDUSTRY

1. Clear Technology Description

2. Technology Assessment

3. Market Assessment

4. Technology Applications

5. Identifying Target Organizations (licensees)

6. Access to Target Decision Makers

7. A realistic & capable Deal Team

HOW WE USED TO MAKE THIS HAPPEN

PHASE I

CLIENT



1. Clear Technology Description



2. Technology Assessment



3. Market Assessment



4. Technology Applications

5. Identifying Target Organizations (licensees)

6. Access to Target Decision Makers



7. A realistic & capable Deal Team

NINESIGMA



Core competency



Core competency



NineSigma
Client Network

HOW WE USED TO MAKE THIS HAPPEN

PHASE II

CLIENT

NINESIGMA

✓	1. Clear Technology Description		✓	Core competency
	2. Technology Assessment	Technology	✓	Core competency
	3. Market Assessment	Landscape	✓	
✓	4. Technology Applications		✓	Ph.D. Brainstorms
	5. Identifying Target Organizations (licensees)		✓	Core competency
	6. Access to Target Decision Makers		✓	NineSigma Client Network
✓	7. A realistic & capable Deal Team			

HOW WE ARE SCALING THIS NOW

CLIENT

EXPERTS

NINESIGMA



1. Clear Technology Description



2. Technology Assessment



3. Market Assessment



4. Technology Applications



5. Identifying Target Organizations (licensees)



6. Access to Target Decision Makers



7. A realistic & capable Deal Team

WHAT IS NINESIGHTS?

A HIGH QUALITY, SECURE, AND COLLABORATIVE ONLINE PLATFORM THAT CONNECTS SOLUTION SEEKERS WITH SOLUTION PROVIDERS AND EXPERTS, MANAGED BY NINESIGMA'S GLOBAL INNOVATION TEAM ▶

WHAT MAKES NINESIGHTS DIFFERENT?



PROVIDES SEEKERS DIRECT ACCESS TO A HIGH QUALITY, TECHNICAL, EXPERT COMMUNITY



PROVIDES CLIENTS **BRANDED VISIBILITY** WITH TARGET INNOVATORS THROUGH FULLY MANAGED INNOVATION PORTALS



UNIQUE **CROSS-INDUSTRY, CROSS-DISCIPLINE** APPROACH



SECURE AND TRUSTED ENVIRONMENT MODERATED BY NINESIGMA



COLLABORATIVE, PROACTIVE ENGAGEMENT BETWEEN SEEKERS AND PROVIDERS



CONFIDENTIALITY AND INTELLECTUAL PROPERTY MANAGED BY NINESIGMA

WE APPLY OUR PROPRIETARY OPEN INNOVATION APPROACH TO OUR INNOVATION PLATFORM

NEEDS – CURRENTLY ABOUT \$100M OF PRIZE MONEY (SELECTED EXAMPLES)

CCEMC:	\$35,000,000
GE-NFL:	\$60,000,000
Manufacture of Liquid-Crystal Polymer:	\$100,000
Global Manufacturing Corporation:	\$1,000,000
A Global Company:	\$75,000
Supplier of Fixtures:	\$400,000
National Supplier:	\$20,000
Supplier of Construction Products:	\$20,000
Fortune 100 Automotive Company:	\$100,000
Fisher-Price:	\$50,000
Global Consumer Goods Company:	\$50,000

PROMOTING INNOVATION NEEDS WITH NINESIGHTS GALLERIES

- ✓ **ENGAGE** our community of vetted technical experts
- ✓ **DRIVE** awareness of your company's brand
- ✓ **EXPLORE** new approaches to collaborative innovation
- ✓ **ACHIEVE** real-world results on a continuous basis

Learn more at NineSights.com



A **NineSights gallery** is a fully moderated innovation workspace that allows you to interact with high-value solution providers.



EXPERT PANELS



Distillation Experts - Application Group

NineSigma is seeking SUBJECT MATTER EXPERTS in Distillation to participate in a range of compensated consulting activities. Candidates will have specific knowledge, existing products, and/or ongoing research related to distillation equipment. [ope \(more\)](#)

🏠 Private Group

Recent Activity

- 🔍 Sankar Raghavan asked **Vapor Permeation** 4 days ago
- 💬 Nick Kacsandi started the discussion **Questions, Comments and the Qualification Form** 1 week ago

32 members

Apr 5, 2013 by



Industry Expert Groups

	<h4>Medicine & Pharmaceuticals</h4> <p>A group for Experts in the Medical and Pharmaceutical fields. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p> <p>Recent Activity</p> <ul style="list-style-type: none"> 🔍 Hemant Joshi created Microfluidizer services 1 week ago 👍 Jonathan Tzeng liked Microfluidizer services 1 week ago 🔍 Kevin Stark created Microfluidizer services 1 week ago 🔍 Hemant Joshi asked Microfluidizer services 2 weeks ago 	32 members	Jul 30, 2012 by
	<h4>Biology</h4> <p>A group for Experts in the field of Biology. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group.</p>	21 members	Jul 30, 2012 by
	<h4>Packaging</h4> <p>A group for Experts in the field of Packaging. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p>	18 members	Jul 30, 2012 by
	<h4>Food Science</h4> <p>A group for Experts in the Food Science field. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group.</p>	34 members	Jul 30, 2012 by Jonathan Tzeng

Industry Expert Groups

	<h4>Electrical Engineering</h4> <p>A group for Experts in Electrical Engineering. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p> <p>Recent Activity</p> <ul style="list-style-type: none"> 💬 MUHAMMAD ARIF started the discussion DURING GRAD 3 weeks ago 	20 members	Jul 30, 2012 by
	<h4>Mechanical Engineering</h4> <p>A group for Experts in Mechanical Engineering. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p>	23 members	Jul 30, 2012 by
	<h4>Agriculture & Farming</h4> <p>A group for Experts in Agriculture and Farming. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p>	17 members	Jul 30, 2012 by
	<h4>Industrial Engineering</h4> <p>A group for Experts in Industrial Engineering. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p>	17 members	Jul 30, 2012 by
	<h4>Energy & Power</h4> <p>A group for Experts in the fields of Energy and Power. Check for upcoming compensated Expert Requests and other industry specific opportunities.</p> <p>🏠 Private Group</p>	35 members	Jul 30, 2012 by Jonathan Tzeng

TECHNOLOGY OFFERS

Technology Offers

Solution Seekers and Providers are encouraged post their own non-confidential technology offers so that all members of the NineSights community may browse these innovative technology offerings.

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Technology Offers

Use this page to browse all Technology Offers on NineSights, or go to the [Featured Galleries](#) to browse both Needs and Technology Offers grouped by Sponsor Organizations. If you have any questions about Technology Offers, the NineSights community, or any other elements, please make use of our [Community Help and Feedback](#) to post comments or questions. For a faster response, feel free to [@ mention Jonathan Tzeng](#) in a status update.

SEARCH TECHNOLOGY OFFERS

Enter search term...

Preferential crystallization for separation of compound forming chiral systems

Background Separation of enantiomers is an essential process in agriculture, pharmaceutical and flavor industry. According to recent survey, single enantiomers account for 50% of the top 500 top selling drugs in the world. Chemical synthesis of a chiral system typically results in a 50:50 mixture of two enantiomers. The resolution of these racemates is usually not simple as chemical and physical properties of both enantiomers are identical. Although liquid chromatography is widely used, ...

[View Full Project](#)

Deadline Date: 17.04.2014 | Publish Date: 04/17/2013 | Status: New | Request Number: NONE

Chamber for rapid and accurate analysis of seed life

A new methodology of determining seeds viability and aging, which provides various advantages. This new method for seeds viability uses combination of thermal imaging technology in a chamber programmable environmental conditions and the quantification of visual information together with selective non-invasive testing methods. Collected measured parameters values of the environment and seeds are used to quantify the viability status of seeds and the life assessment analysis. This system has a ...

[View Full Project](#)

Deadline Date: NONE | Publish Date: 04/16/2013 | Status: New | Request Number: NONE

Single low cost system to replace multiple laboratory instruments

Single low cost precision instrument that can replace a variety of separate dedicated devices such as the: oscilloscope, galvanometer, potentiostat, L C and R meter, signal generator, square wave signal generator, FM signal generator, sine current and voltage generator, wobbler generator, diode and transistor characteristics measurements, and thermal analysis instruments such as DSC, DTA, TGA. The system can also be used as a simulator for teaching students how to use scientific measurement in...

[View Full Project](#)

Deadline Date: NONE | Publish Date: 04/16/2013 | Status: New | Request Number: NONE

EFFICIENT METHOD OF GENERATING HEAT AND ELECTRICITY FROM AGRICULTURAL BY-PRODUCTS

A furnace for the combustion of biomass hay bales, with automatic fuel feeding which enables an efficient controlled and continuous combustion process. The system uses agricultural by-products in standard bales form from fields to create thermal energy. It can be used for the production of thermal energy only (for heating and industrial processes) but also for the combined production of heat and electricity (CHP facilities). The solution is

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Preferential crystallization for separation of compound forming chiral systems

created by Lara Cuypers on Apr 17, 2013 11:26 AM, last modified by Lara Cuypers on Apr 17, 2013 11:45 AM

Background

Separation of enantiomers is an essential process in agriculture, pharmaceutical and flavor industry. According to recent survey, single enantiomers account for 50% of the top 500 top selling drugs in the world. Chemical synthesis of a chiral system typically

results in a 50:50 mixture of two enantiomers. The resolution of these racemates is usually not simple as chemical and physical

properties of both enantiomers are identical. Although liquid chromatography is widely used, decrease in productivity with increasing demand for higher purity makes the process less effective. So far preferred crystallization processes have only been established for "conglomerate forming systems", but were not available for 90 % of the known chiral systems, that can be described as "compound forming systems".

Invention

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Advanced Electronics Cooling

created by Jonathan Tzeng on Feb 13, 2013 3:17 PM, last modified by Jonathan Tzeng on Apr 10, 2013 9:39 PM

Technology Overview

An advanced, dual piezoelectric, thermal cooling jet (DCJ) is a 1 mm thick, ultra-compact bellows device that does the work of a fan more efficiently in less space. It also can enable passive cooling applications, such as tablets, where improved thermal solutions are required.

Benefits Summary:

- Reduces total thickness of application chassis size
- Very quiet, eliminating fan sounds
- Longer battery life by reducing power consumption
- Good manufacturability
- Allows multiple jets (up to 3 DCJs)

Features:

- Ultra compact space (1 mm thickness x 40mm x 40mm)
- Acoustically quiet, less than 35 dBA
- Low power consumption, less than 300 mW
- Simple structure
- Scalable; one circuit driver can control up to 3 DCJs

Development Status Summary: Laboratory Prototype available

Potential Applications:

Active and Passive cooling applications:

- Laptops, thin laptops, small desktop computers, projectors, tablet PCs, NetPCs, smart phones, mobile devices, LCD TVs, pico-projectors, routers, switches, thinner blade servers, automotive electronics cooling, and medical devices

Intellectual Property: Patents

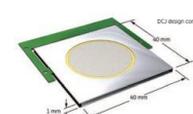
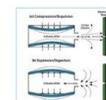
Collaboration Type Sought: Collaboration and License

Terms and Restrictions: Terms are negotiable

Seller Support:

- Documentation
- Technical Assistance

licensing information: GE Licensing captures the value of the GE brand and develops, accelerates, and extends the reach of GE technology around the world. Through strategic partnerships, we are driving innovation and



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SOME OPEN QUESTIONS

- ❖ Ideal stage of technology maturity for technology transfer to Industry:
Trending towards more mature stages
- ❖ Business Model that allows multiple 3rd parties to get compensated for efforts (Experts, NineSigma, other intermediaries)
- ❖ Same process for University Technologies as for Technologies originally from companies?

Thank You

PRESENTER

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