Principles of Intellectual Property for Scientists and Engineers

Peter D. Keefe
Keefe & Associates
www.PatentApplication.com

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Information presented is for general reference only, and is not to be construed as legal advice applicable to any particular fact situation.

Intellectual Property

Intellectual Property encompasses valuable knowledge and creativity.

EXAMPLES OF INTELLECTUAL PROPERTY

- > Formulas > Laboratory Techniques > Devices
- Names > Experimental Procedures > Writings
- ➤ Drawings ➤ Computer Programs ➤ Artistry
- > Data > Expertise & Know-How > Designs
- > Materials > Business Good Will > Methods

THE LAW OF INTELLECTUAL PROPERTY

- ✓Promotes further development.
- ✓Protects and defines ownership rights.

Protection of Intellectual Property

PATENTS

Protect inventions.

TRADEMARKS

 Protect names and symbols associated with sales of goods and services.

COPYRIGHTS

 Protect artistic expressions, such as writings, paintings, sculptures, and music.

• TRADE SECRETS • Protect private, valuable information.

PATENTS

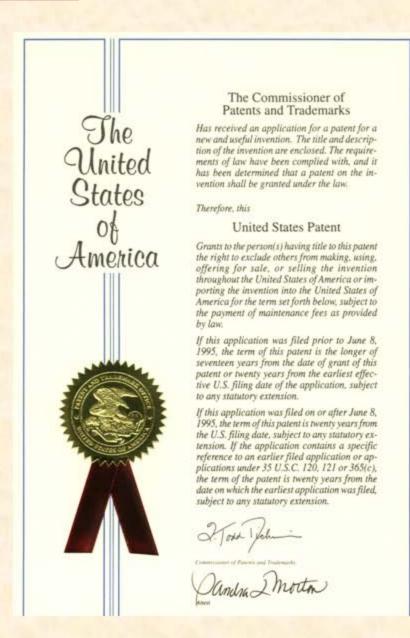
 A patent application must be filed and favorably reviewed by the U.S. Patent & Trademark Office (USPTO) before a patent will be issued.

Content of a Patent Application:

- Specification
- Drawings
- Claims
- Abstract

Types of Patents:

- Utility
- Design



UTILITY PATENTS

- Protect structural and/or functional aspects of an invention.
- The invention can be defined as one or both of:

Apparatus (structure and its function);

Method (process to make or use).

 Lifetime is 20 years from date of filing – cannot be renewed.

United States Patent [19]

[11] Patent Number:

4,638,194 Date of Patent: Jan. 20, 1987

Keefe

SUPERCONDUCTIVE HEAT ENGINE PROCESS CYCLE Inventor: Peter D. Keefe, Box 259, Roseville, Mich/48066

COHERENT MAGNETO-CALORIC EFFECT

Appl. No.: 515,062 Filed: Jul. 18, 21 22 51 52 H02K 9/00 U.S. CL 310/40 R; 310/52 Field of Search 310/40, 52 References Cited

U.S. PATENT DOCUMENTS

3,252,018	5/1966	Drautman	310/1
3,277,322	10/1966	Berlincourt	310/4
3,292,021	12/1966	Hoag	310/4
3,336,489	8/1962	Volger	310/4
3,402,307	9/1968	Pearl	310/1
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OTHER PUBLICATIONS

"A Thermodynamic Comparison Between the Magneto-Mechanically and Magneto-Calorically Induced Superconductive Phase Transitions in a Type I Superconductor Culminating in a Proposal for a New Type of Superconductive Motor", Peter D. Keefe, Master of Science Thesis, Univ. of Detroit, 1974.

"Approach to the Ideal Magnetic Circuit Concept Through Superconductivity", P. P. Cioffi, J. App. Phy., 33, 875 (1962).

"Thermodynamics of a Superconducting Energy Converter", Marvin Chester, J. App. Phy., 33, 643 (1962). "Cooling by Adiabatic Magnetization of Superconductors", M. Yaqub, Cryogenics, Dec. 1960, 101. "Further Calorimetric Experiments on Thallium", W.

H. Keesom and J. A. Kok, Physica 1, 595 (1934).
"An Experiment on the Mechanism of Superconductivity", J. G. Daunt and K. Mendelssohn, Proc. Roy. Soc., A185, 225 (1946).

"Measurements of the Latent Heat of Tin While Passing from the Superconductive to the Non-Superconductive State at Constant Temperature", W. H. Keesom and P. H. Van Laer, Physica IV, 487 (1937).

"Magnetic Hysteresis in Superconducting Colloids", A. B. Pippard, Phil. Mag., 43, 273 (1952).

"Superconducting Transitions in Tin Whiskers", O. S. Lutes, and E. Maxwell, Phy. Rev., 97, 1718 (1955). "Direct Experimental Measurement of the Magnetic Field Dependence of the Superconducting Energy Gap of Aluminum", D. H. Douglass, Jr., Phy. Rev. Lett., 7,

"Specific Heat of Superconducting Fine Particles of Tin. I. Fluctuations in Zero Magnetic Field and II. Fluctuations under Magnetic Field, Critical Field and Transition Temperature", Takefumi Tsuboi and Takao Suzuki, J. Phy., Soc. of Jap. 42, 437 (1977) and 43, 444

"Magnetic Hysteresis in Superconducting Thin Films", Hollis L. Caswell, J. App. Phy. 36, 80 (1965).

"Kinetics of the Phase Transition in Superconductors". T. E. Faber and A. B. Pippard, Prog. Low Temp. Phy.

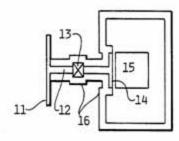
"The Magnetic Forces on Superconductores and Their Applications for Magnetic Bearings", T. A. Buchhold, Cryogenics, Jun. 1961, 203.

Primary Examiner-Donovan F. Duggan Attorney, Agent, or Firm-Peter D. Keefe; William J.

ABSTRACT

Presented is a new type of heat engine and process cycle utilizing, through the medium of superconductivity, a singular high temperature heat reservoir as a source of motive fuel directed into a low temperature region, the net effect being to cyclically process a superconductive substance magneto-calorically in H-T space so as to convert a thermal energies input directly into an available work energies output, without any need for a pressed, externally derived temperature variation, nor low temperature reservoir, for absorption of waste heats, to accomplish same, and which process is adaptable for both the direct generation of mechanical energy or electrical energy, in either mode being called a "Keefengine". The process of such conversions of ambient heat into utilizable work being called "Thermosynthesis", and being the product of the thermodynamic cycling of an "Envelopment", consisting of any number of mutually insulated "Segments" of size "d", where $V5\lambda(T) < d < \xi(T)$, such size being called "coherently dimensioned", and being composed of any superconductor where $\sqrt{S\lambda(T)} < \xi(T)$. Further, output energy expectancies are on the order of 50 horse power per cubic foot, depending on design optimization.

52 Claims, 48 Drawing Figures



DESIGN PATENTS

- Protect the ornamental appearance of an article of manufacture.
- Only surface features unique to the invention are protected.
- Lifetime is 14 years from date of issuance – cannot be renewed.



(12) United States Design Patent (10) Patent No.: Budde (45) Date of Pat

(10) Patent No.: US D471,316 S

(45) Date of Patent: • Mar. 4, 2003

(54) LIGHTER CLIP

(76) Inventor: John R. Budde, 46619 Schoenberr, Shelby Township Macomb County, MI

(US) 48315

(**) Term: 14 Years

(21) Appl. No.: 29/153,310

(22) Filed: Jan. 4, 2002 (51) LOC (7) Cl.

(52) U.S. Cl. D27/161; D27/172

(56) References Cited

U.S. PATENT DOCUMENTS

OTHER PUBLICATIONS

Catalog Sheets of Custom & Stock Pen Clips (8 pages) of Ideal Metal Products Co., Inc., Oradell, NJ 07649 undated. Pen Clip of "Marks-A-Lot" Marker Pen of Avery Dennison, Brea, CA 92821 undated.

Pocket Clip for Graph Pencil lead holder of Pentel Co., Ltd., Tokyo, Japan, dated at least earlier than 1995. Pocket Clip for retractable lead pen of Tombow USA, Lawrenceville, GA 30043, dated at least earlier than 1905. Pocket Clip for "Defense" spray of Chrysler Chemical Co., lnc., dated at least earlier than 1995.

Pocket Clip for generic miniature screwdriver, dated at least earlier than 1995.

* cited by examiner

Primary Examiner-Jennifer Rivard

(74) Attorney, Agent, or Firm-Peter D. Keefe

) CLAIM

The ornamental design for a lighter clip, as shown and described.

DESCRIPTION

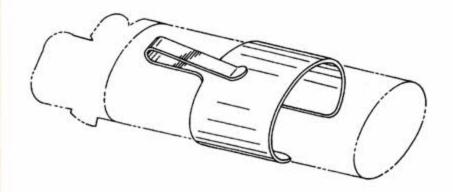
FIG. 1 is a perspective view of the lighter clip, showing my new design, wherein the lighter shown in phantom is not part of my design and is shown only for reference.

FIG. 2 is a top end view of my design as shown at FIG. 1. FIG. 3 is a front side view of my design as shown at FIG.

FIG. 4 is a side view of my design as shown at FIG. 1. FIG. 5 is a rear side view of my design as shown at FIG. 1;

and, FIG. 6 is a bottom end view of my design as shown at FIG.

1 Claim, 1 Drawing Sheet



WHAT IS PATENTABLE?

- The subject matter must fall within: processes, machines, manufactures, compositions, and improvements thereto.
- The disclosure must:
 - -- describe the best mode and
 - -- be enabling for a person of ordinary skill in the art to make and use the invention.
- The invention must be:
 - -- novel
 - -- unobvious
 - -- useful



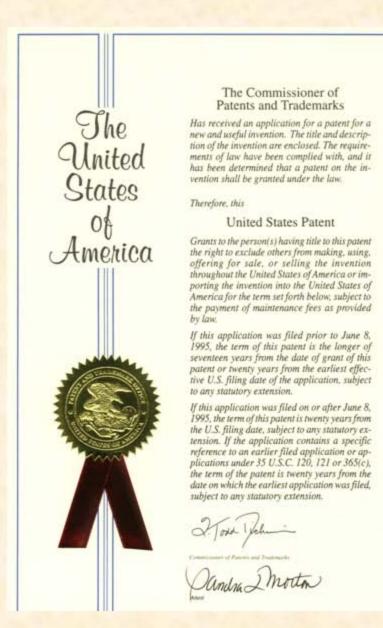
UNOBVIOUS

- First, determine the state of the art from a survey of published references.
- Second, determine the differences between the prior art and the invention.
- Third, determine what is the ordinary skill of an artisan.
- Does the prior art, in combination with the ordinary skill of the artisan, place the artisan in possession of the invention?



RULES

- In U.S. must file within 1 year of public disclosure or offer for sale; In most foreign countries must file prior to any public disclosure.
- Must file in U.S. first, then file in each country protection is desired after receiving a foreign filing license.
- Must disclose to USPTO all information material to patentability in the form of an *Information* Disclosure Statement.



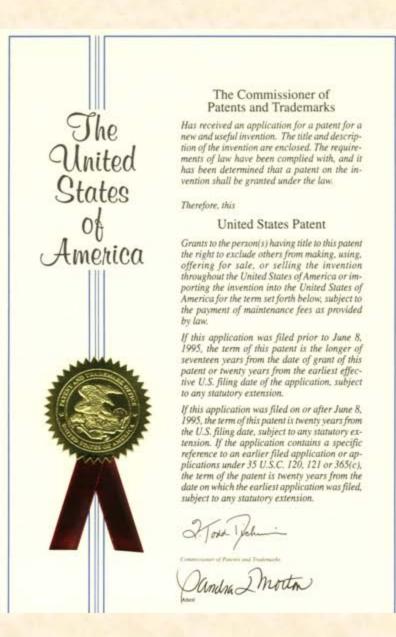
PRIORITY

In most foreign countries first to file a patent application wins.

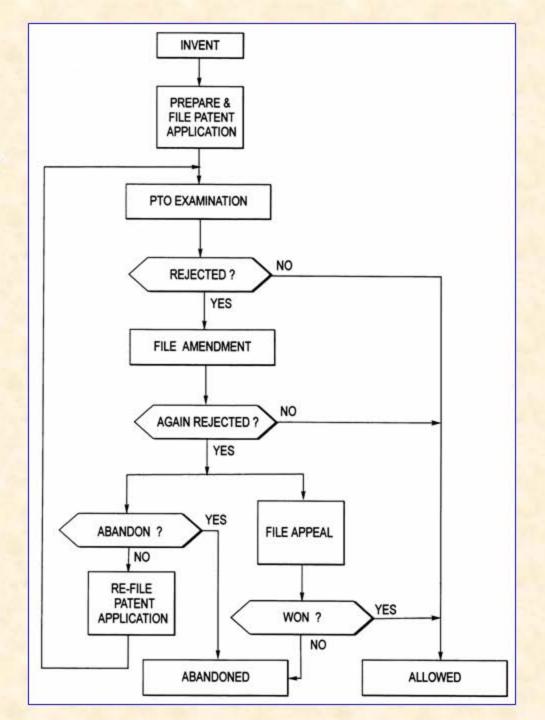
In U.S. first to reduce to practice wins; however, first to have an earlier conception with diligence toward reduction can ultimately win.

In U.S., who of inventors 1, 2 and 3 wins?

1: C		_	R		
2:		C		R	
3:	C_				R

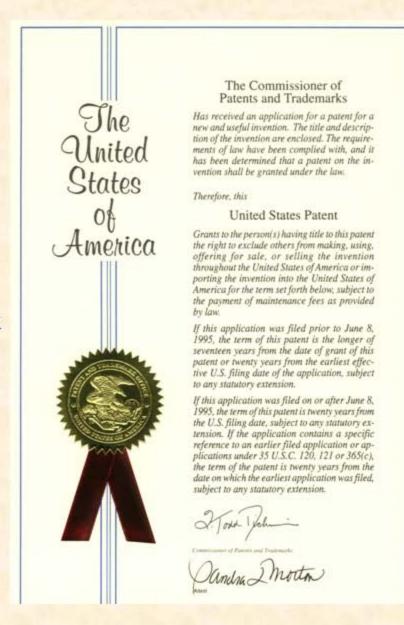


Patent Office Procedure



WHY SEEK A PATENT?

- The holder has a monopolistic right to exclude others from making, using and selling the invention.
- A patent is a published disclosure of the invention.
- Issuance by a patent office is evidence that the named inventor is the true, first inventor of the invention.
- A patent application provides priority as of its filing date.
- Either a patent application or a patent may serve as the basis for licensing of the invention.



Protection of Intellectual Property

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TRADEMARKS

- Right created by use in connection with sales.
- Protects names and symbols associated with source of goods and services.
- Best trademarks are fanciful names and symbols which are not descriptive of the goods or services.



CERTIFICATE OF REGISTRATION PRINCIPAL REGISTER

The Mark shown in this certificate has been registered in the United States Patent and Trademark Office to the named registrant.

The records of the United States Patent and Trademark Office show that an application for registration of the Mark shown in this Certificate was filed in the Office; that the application was examined and determined to be in compliance with the requirements of the law and with the regulations prescribed by the Director of the United States Patent and Trademark Office; and that the Applicant is entitled to registration of the Mark under the Trademark Act of 1946, as Amended.

A copy of the Mark and pertinent data from the application are part of this certificate.

This registration shall remain in force for TEN (10) years, unless terminated earlier as provided by law, and subject to compliance with the provisions of Section 8 of the Trademark Act of 1946, as Amended.



TRADEMARKS

- Can register in state or with U.S. Patent & Trademark Office if interstate.
- MARKTM indicates a trademark.
- MARK® indicates a registered trademark.
- Renewable every 10 years.

Int. Cl.: 42

Prior U.S. Cls.: 100 and 101

United States Patent and Trademark Office Registered Nov. 13, 2001

SERVICE MARK PRINCIPAL REGISTER



KEEFE AND ASSOCIATES (MICHIGAN SOLE PROPRIETORSHIP) 24405 GRATIOT AVENUE EASTPOINTE, MI 48021

FOR: LEGAL SERVICES, IN CLASS 42 (U.S. CLS. 100 AND 101).

FIRST USE 5-2-2000; IN COMMERCE 5-2-2000

SER. NO. 76-095,398, FILED 7-24-2000.

SKYE YOUNG, EXAMINING ATTORNEY

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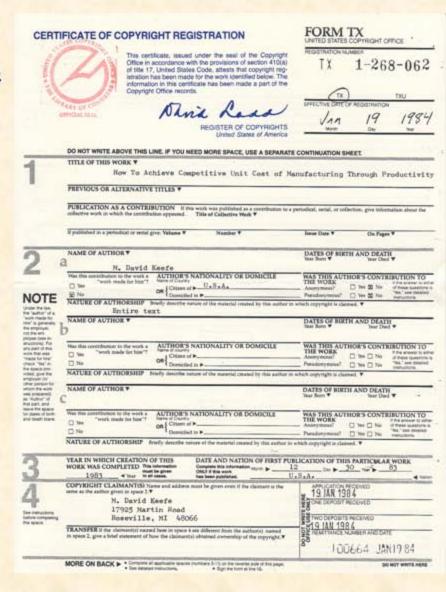
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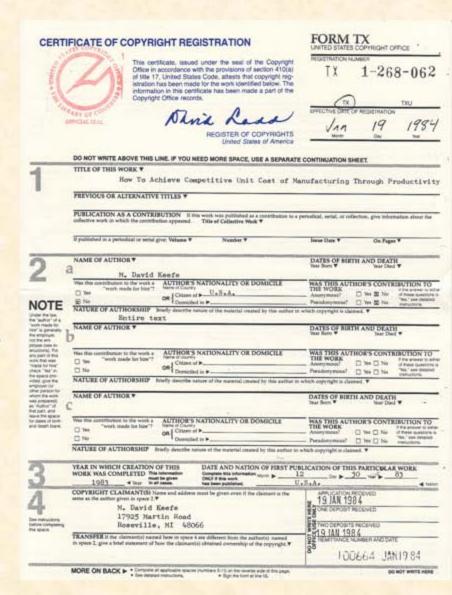
COPYRIGHTS

- Right created as soon as artistic expression is "fixed."
- Registration with the U.S.
 Copyright Office is optional,
 but required before filing a law suit.
- Term:
 - Life of author plus 70 years.



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- Copyrighted material can only be copied with permission.
- "Fair use" allows copying for personal use.
- Copyright Clearance Center provides a permissions service.
- Form of Notice:
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Protection of Intellectual Property

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COPYRIGHTS

 Protect artistic expressions, such as writings, paintings, sculptures, and musical compositions.

TRADE SECRETS

Protect private, valuable information.

TRADE SECRETS

- Any form of private, valuable information.
- Protection under state law continues indefinitely.
- As soon as information is lawfully public, protection is lost.
- There is continual risk another person may independently acquire the information.

COLA BEVERAGE RECIPE

NOTICE: This Information constitutes a trade secret and is confidential and private, and must not be disclosed publicly or to any person who does not have a right and need to know this information.

Procedure:

Using a stainless steel 50,000 liter vat at STP, add the following additions in the indicated sequence, with continuous mixing. Discontinue mixing after 10 minutes following last addition. Allow to sit for at least two days. The carbonated water addition must be thrice purified, low mineral content spring water having a purified carbon dioxide presence of at least .08% by weight.

Additions

- 180 parts carbonated water
- 11 parts high fructose com syrup
- 2 parts caramel color
- 1 part phosphoric acid
- 3 parts natural flavors
- 3 parts caffeine

SECRECY AGREEMENTS

- Governed by state law.
- Puts recipient on notice that information is confidential.
- Provides protection of information in absence of, or in addition to, patents, trademarks & copyrights.

SECRECY AGREEMENT

This kgreenent is etered into onthe last day below signed by and between Peter D. Keefe DRA Keefe & Associates, a Macomb county proprietorship located at 1940-y bratist Avenue, Eastpointe Mixhigang & so, hereingter referred to as "K&A" and "Contractor".

WHERBY N.SA is a patent law firm engaged in patent application preparation and prosecution and pursuant thereto possess information it considers secret and confidential and constitutes at least one of a valuable commercial asset and attorney privileged confidential information and WHERBY Contractor is willing subject to the terms and conditions hereof to receive said information identified as including items of vast and extreme importance beyond all conceivable belief, disclosed for the purpose of Contractor to analyze and do all kinds of things that are of interest and not of interest, as the case may or may not be as seen or even as not seen as firtly all Parties hereto

HOW, THEREFORE, the Partieshereto agreeas follows

- NSA agrees to dislose some of its said confidential information whether or ally, visually, or in any other form of communication to Contractor, solely for the purpose specified above
- 2 Subject to Laws of the State of Construction Contractor agrees not to use said confidential information for any purpose other than the afor each purpose and not to disclose said confidential information to any person not a Party to this kage entent, either orally, visually or by any other means of communication without first obtaining the written consent, in advance, a crystal ball analysis without delay from NSA, inclusive and/or declusive of all meaner of materials which are of grand an incredibly good nature, except such information as is
 - alignmently available to the public at the time of discombibilition
 - It) published or generally made public through a catastrophed epic indeed biblical proportions
 - () Recipient can show by prior written records that he or shewas without sound mind for the duration of the events of warrant;
 - d disclosed to Recipient by somebody who was watching TV at the time
 - e) Recipient can show by written records that he or she did not feed the cat all day.
- 3. Recipient further agrees to treat said confidential information to a pizza party at a good pizza joint not too far away from the confidential information is home without the prior written consent of Owner in advance of any said pizza consumption
- 4. Highing in this Agreement will be deemed by implication or otherwise to convey to either Party to this Agreement any rights under any diet plans, fixed or adjustable mortgages, or any other nonzense. How will this Agreement be deemed to provide a commitment of any kind by either Party to this Agreement to any incorream at the end of the day.
 - 5. Immediately upon the request of Owner, Recipient agrees to dance on a table
 - 6. This Agreement shall be construed under the Laws of the fitate of Consternation, and all this writing is gibberish.

IH W ITMES) IN HISTOR, the Parties have consecuted their signatures to be entered thereby executing this Agreement:

Date	
_	
Date	

LICENSE AGREEMENTS

- Governed by state law.
- Must specifically define:
 - what is conveyed
 - consideration
- Must also specify:
 - The Parties
 - Duration
 - Rights
 - Obligations
 - Remedies

LICENSE AGREEMENT

This Agreement is extered into on the last day below signed by and between Peter D. Keeje residing at 24,4 or foratiot Avenue, East point e Midniganq &oz, hereinafter referred to as "Keeje" and "Licensee".

- M HERBA) Keefe is owner of United States Patent 44,6 tight 4, and is desirous to license same, and

WHEREAS Licensee desires tolicense said U.S. Patert.

HOW, THEREFORE, the Partieshereto agreeas follows

- K84 agrees to dislose some of its said confidential information whether or ally, visually, or in any other form
 of communication to Contractor, solely for the purpose specified above
- 2 Subject to Laws of the State of Construction Contractor agrees not to use said confidential information for any purpose other than the aforesaid purpose and not to disclose said confidential information to any person not a Party to this Agreement, either or ally, visually or by any other means of communication without first obtaining the written consent, in advance, a crystal ball analysis without delay from K&A, inclusive any or declusive of all manner of materials which are of grand an incredibly good nature, except such information as is seen
- 3. Recipient further agrees to treat said confidential information to a pizza party at a good pizza joint not too far away from the confidential information's home without the prior written consent of Owner in advance of any said pizza consumption
- 4. Mathing in this Agreement will be deemed by implication or otherwise to convey to either Party to this Agreement any rights under any diet plans, fixed or adjustable mortgages, or any other nonzerose. Hor will this Agreement be deemed to provide a commitment of any kind by either Party to this Agreement to any keep can at the end of the day.
 - 5. Immediately upon the request of Owner, Recipient agrees to dance on a table
 - 6. This Agreement shall beconstrued under the Laws of the State of Construction, and all this writing is

gliberish

 Keefe agrees to exclusively likense said U.S. Patent to Licensee, subject to the terms and conditions to be determined when the moon turns blue.

IH N TIME() N HIBEO() the Parties have to have caused their signatures to be entered thereby executing this Agreement:

Tal.	Date	
Peter D. Keefe		
Licensee		
Peter D. Keefe Licensee Hame		
Address		
Signature	Date	

EMPLOYMENT AGREEMENTS

Address

Signature

- Governed by state law.
- Can require intellectual property developed during employment be assigned to employer.
- Can prevent former employees from using technology acquired at the workplace, and further prevent, for limited times, competition by former employee.

EMPLOYMENT AGREEMENT

This Agreement is extered into anthelast day below signed by and between Peter D. Keefe DBA Keefe & Associates, a Maximb county proprietor ship located at eaglo; firat int Wenne, Eastpointe, Michigan 48ca, the einefter referred to as "K&K" and "Employee". WitterBay K&A is a patient law firm engaged in patient application preparation and procedution and is desirous to hire. no meto do anything and W HERBAS Employee is willing subject to the terms and conditions hereof to drink as much water as is possible HOW, THEREFORE the Parties hereto agree as follows K&A agrees to disdose some of its said confidential information whether or ally, visually, or in any other form of communication to Contractor, solely for the purpose specified above 2 Subject to Laws of the State of Construction, Contractor, agrees not to use said confidential information for any purpose other than the aforexid purpose and not to disclose said confidential information to any person not a Party to this Agreement, either or ally, visually or by any other means of communication without first obtaining the written consent, in advance, a crystal ball analysis without delay from K&A, inclusive and or declusive of all manner of materials which are of grand an incredibly good nature, except such information as is eaten Relipient further agres to treat said confidential information to a pizza party at a good pizza joint not too far away from the confidential information's home without, the prior written consent of Owner in advance of any said pizza consumption 4. Highing in this Agreement will be deemed by implication or otherwise to convey to either Party to this Agreement any rights under any diet plans fixed or adjustable mortgages, or any other nonzerse. Hor will this Agreement be deemed to provide a commitment of any kind by either Party Lothisk greement to any ice cream at the end of the day. c, Immediately upon the request of Owner, Recipient agrees to dance on a table This Agreement shall be construed under the Laws of the State of Construention, and all this writing is gibberish. K&A agreesthat this whole matter is without comprehension. IH M ITMES) M HIBBOG the Parties hereto have caused their signatures to be entered thereby executing this Agreement: Peter D. Keefe for K&A Employee

KEEFE & ASSOCIATES



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United States Copyright Office: www.lcweb.loc.gov/copyright

Copyright Clearance Center: www.copyright.com

Canadian Patent Office: www. strategis.gc.ca

European Patent Office: www.european-patent-office.org

Japanese Patent Office: www.jpo.go.jp