



The Inventor

Who he is and how may he be identified



Enric Carbonell Vallès
ABG Patentes
Agente Europeo de Patentes

Why is inventorship important for your company?



- In some countries, notably the United States, a **false declaration** of inventorship can lead to a **patent being invalidated**.
- It is key to give proper consideration to identifying **all the inventors** and also to **not declaring** as an inventor **any person who should not** properly be identified as such.

Inventorship is not Authorship

- In **academic** culture it is customary to name as an author **everyone who worked** on a project.
- Nevertheless the legal **requirements** to be an **inventor** are much **more demanding**.

What are the actual requirements

- This depends to some extent on the country, but.....
- The most widespread practice is to require **conception of the invention to be an inventor.....**
-while excluding any other reason to attain such qualification.

An inventor **is** someone who:

- Has a **definite and permanent idea** of the complete, operative invention as it is to be applied in practice, meaning that he has a **specific, settled idea or a particular solution to a problem.**
- **Can describe his idea** with particularity (complete mental picture of the invention) to allow a skilled artisan **to reduce the concept to practice** without extensive research or experimentation.

An inventor is someone who: (II)

- **Conceived** the initial, but detailed ideas, which defined the research which leads to the invention.
- Actually **devised the experiments** which form the basis of the patent application.
- **Carried out experiments** described in the application **which required initiative** to complete (i.e. because of unexpected practical difficulties).
- **Interpreted the data** disclosed in the application if the data was **unexpected** or its **implications were unclear**.

An inventor is not someone who: (I)

- Merely suggests a desired result without any disclosure of the means by which to accomplish the result.
- Simply carried out work under instruction (regardless of how much skill and effort this took).
- Merely assisted the actual inventor after conception of the claimed invention.
- Contributed ideas while the invention was being developed, but those ideas don't contribute to the claimed invention.

An inventor is not someone who: (II)

- Supplied labour, supervision, routine techniques or other non-mental contributions.
- Had no part in the research, regardless of whether he funded it, contributed general work or assistance or was associated with it in other ways
- Was a Project Manager or Supervisor but did not contribute technically to the actual invention

How should inventorship be determined?

- Decisions on inventorship have to be made on a **case by case basis** taking **the claims as the definition** of the invention and the **documented evidence** of participants.
- Each “potential inventor” needs to answer the questions, “**what did I contribute intellectually** to the patent application?” and “**would the final conception without my contribution have been less** (less efficient, less simple, less economical, less something of benefit)?”
- Determination of inventorship is best done **at the Patent Department** working in close **cooperation with researchers** and backing the decisions on **documentary evidence**.
- The Patent Department **may make errors!** Help them **avoid them** by **keeping good records** of your work!

Some examples in Chemistry

- For conception of specific compounds one must **not only have a mental picture of the structure** or other characteristics that distinguish it from the prior art but **also an operable process for making it.**
- **General knowledge** regarding biological or other functional **properties of groups** of complex chemical compounds **does not confer inventorship** status with respect to **specific compounds.**

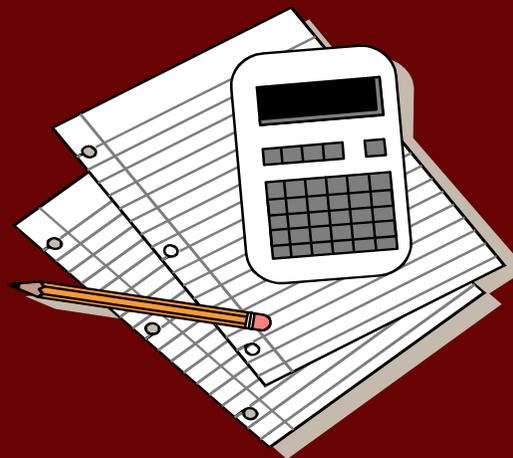
Challenges in implementation

- It frequently requires a **change in corporate's culture**.
- **Decisions** on inventorship **may not appear fair**.
- An **understanding** by everyone that good ideas will be patented **will encourage** everyone who wishes to be an inventor **to think creatively**.
- One must not expect to be given the title of “inventor” unless he **truly deserves it**.



Keeping Laboratory Notebooks

(Documenting Scientific Discovery)



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Why keeping lab notebook?

- Primary **source of evidence** when discussions on **inventorship** do arise:
 - Interference in the US because of first-to-invent system
 - Discussions with uncooperative inventors
- What needs to be determined:
 - **Who** the inventor(s) is/are?
 - What the **dates** of conception and reduction to practice are?

Some concepts of US Patent Law

- Invention in the US comprises two elements:
 - **Conception**: A description containing details of the invention to enable a person of ordinary skill to make it operational without further creative action is sufficient to establish conception .
 - **Reduction to practice**: Reduction to practice can be “constructive” (by filing an enabling patent application) or “actual” (by making continuous and deliberate steps to reduce an idea into practice by completing a working finished product, such as a functional prototype or a useful composition e.g. the synthesis of a chemical compound)
- To prove a date of invention it is necessary:
 - to have proof of the **date of conception**
 - to **show diligence in its reduction to practice**, i.e steady, uninterrupted and constant work following conception

Typical US Scenarios

There are 3 simplified scenarios when determining first to invent:

-  Party 1 was the first to conceive and reduce to practice  Party 1 prevails
-  Party 1 was first to conceive, **did not show diligence** and Party 2 was first to reduce to practice  Party 2 prevails
-  Party 1 was first to conceive **did show diligence** but Party 2 was first to reduce to practice  Party 1 prevails

Consequences

- To prove a date of invention it is necessary:
 - to have proof of the **date of conception**
 - to show **diligence in its reduction to practice**, i.e steady, uninterrupted and constant work following conception

- Rule: Unexplained periods of inactivity could lose a case. Thus, **all activities must be accounted for**, say, sample analysis that resulted in a delay in the proceedings. Even apparently irrelevant entries noting “on vacation” should be included

What is essentially a lab notebook?

- A notebook is a **log providing timed evidence** of every activity undertaken by its owner.

The Golden Rule

- “The notebook should be maintained so carefully and completely that, at some later time, its author or **any other scientist could repeat any experiment** or operation using only the lab notebook as a resource”

Do use bound books (I)

-  Inventors should use permanently **bound notebooks**, e.g., notebooks with glue bindings.
-  Each notebook is for the **exclusive use** of the person to whom it was issued.
-  An **exception** is when several people are working on the same project in such a way that having **entries split** among several notebooks will **result in notebooks which are not self-understandable**.
-  In such a case all people should share the same notebook (issued to all of them) and **initial their own entries**

Do use bound books (II)

-  The first pages of the notebook should contain the **Table of Contents** where each experiment is given a number, a title and the pages where information is to be found on the experiment.
-  In general, the notebook should be **arranged in chronological order**, so that when an experiment ends the next one begins.
-  If one must start an experiment before another is finished, a **note is made in the last page of the unfinished experiment with the page on which it will be continued.**

Do sign and date (I)

- Each **notebook** should be **signed and dated** on the inside front cover to indicate the first day the recipient started using the notebook. **Each entry should be signed and dated on all its pages.**
- At least one** but preferably two independent **witnesses**, i.e. someone **who understands the technology** but will **not be named as a co-inventor** in the invention, should sign and date each entry after the statement “Read, witnessed and understood by _____.”

Do sign and date (II)

- The objective of **signing** is not to merely show that the witness knows that the book existed at a certain date but to **corroborate the inventor's written evidence** that certain work was actually done when and as that evidence indicates.
- For this reason it is **necessary that the witness** has observed the work done and **is actually able to understand** what he reads and signs.
- The witness should preferably **sign the entries** on a contemporaneous or fairly contemporaneous basis, but entries can also be reviewed, signed and dated on a periodic, e.g., **weekly or biweekly** basis.

Do use ink

-  Notebook entries should be **made in ink** and in chronological order.
-  Entries should **not be erased or "whited out"**. If an entry contains an error, a **line should be drawn through the error so it can still be read** and new text should continue in the next available space.

Don't leave blank spaces

- Although for the sake of cleanliness and to make things easier to find, it is advisable to **start each entry in a new page, blank gaps** between entries should be **avoided**.
- If a blank space is left on a page, a **line or cross should be drawn through the blank space**, and the **page dated** to prevent subsequent entries.

Don't modify

- Prior entries should **not be modified at a later date**. If data were omitted, the new data can be entered under a new date and cross-referenced to the previous entry.
- If necessary (i.e. the reason for the alteration is not obvious), a **reason for the alteration should be given**. This is to avoid suspicion of concealment.
- Record experiments when they are performed.

Do staple attachments (I)

-  Equipment generated **data should be attached** in the notebook or, when this is not feasible, **notes** should be made **where such data can be found**.
-  Cross-reference the notebook and the data that is not actually in the notebook.
-  **Attachments** such as graphs, or computer printouts should, when feasible, be **permanently affixed in the notebook** (e.g., by stapling). **Sign and date across both the attachment and the underlying notebook page**.

Do staple attachments (II)

- If the attachment **cannot be stapled**, it should be **placed in an envelop** stapled to the notebook. The envelop and page should then be signed and witnessed making reference to the attachment being place in the envelop.
- It is also advisable to **label the space** where the attachment will go with a description of the item and the results it contained. This way, if it is removed, there will be a record of it.

Don't remove originals



No original pages should be removed from the notebooks
(the pages should be numbered).

Do explain abbreviations and special terms



-  Do **use standard accepted terms**; avoid abbreviations or code names, trademarks and trade names if possible.
-  If they are used, **explain abbreviations and terms** that are non-standard. Explain in context, in a table of abbreviations, or in a glossary.

Do provide factual detail (I)

-  **Record test descriptions**, including preferred operating conditions, control conditions, operable and preferred ranges of conditions, and alternate specific materials; test results and an explanation of the results; and photos or sketches of the results or the test device.
-  If standard procedures are used and not discussed in the notebook in detail, it should **be noted where full descriptions of such standard procedures can be found**.
-  For sketches, graphs and photos **do provide an explanatory memoranda** sufficient to identify and explain the subject matter.

Do provide factual detail (II)

- Any **conclusions** should be **short and supported** by the factual data.
- Only scientific **conclusion based on what was actually done and observed** and not on what one believes should have been done or observed must be made.
- Opinions or speculation** about the invention **should be avoided** (Avoid statements like: “the experiment failed (or worked)”, “the idea is obvious”

Do outline new experiments

- Every time a **new project** or experiment is started a **new page** should be used, a title given and the objective and rationale should be briefly outlined (e.g., in a short paragraph or by providing a flowchart).
- This will assist in removing subsequent speculation as to why the experiments were conducted.

Do keep a complete log of your activities

- Not only experiments run in the lab are important to support the existence of an invention.
- Relevant discussions from lab meetings should be recorded as should ideas or suggestions made by others.
- The names of the people making the ideas and suggestions should be carefully documented. This information may be important in establishing inventorship

Do track notebooks

- Ideally, each lab should **maintain a catalogue of notebooks** in which each notebook is assigned a number, and the name of the author of each notebook is recorded.
- Further, the **date the author received** the notebook as well as the **date the notebook was completed** and turned should be recorded.
- Upon leaving the lab, the author should return all notebooks checked out by or to him.

Do save completed notebooks

-  All completed notebooks should be indexed (e.g., by number, by author, by subject area) and **safely kept in a central repository**, together with **corresponding patent applications or patents**.
-  Lab notebooks that relate to inventions on which patents have been granted should be **kept for the life of the patent plus six years**.

Do use correct grammatical style (not key)

- In English use the past tense (e.g., “was heated) to describe the experiments that were actually performed.
- In Spanish use the impersonal (e.g., “se calentó) to describe the experiments that were actually performed.

Do not be frightened to write too much!



- Your laboratory notebook should be a complete record of what has been done.
- Remember, the more details you give, the better chances you will have of successfully proving you were the “first-to-invent” if someone tries to patent your invention in the United States.

The Guidelines at a glance

-  Do use bound books
-  Do sign and date
-  Do use ink
-  Don't leave blank spaces
-  Don't modify
-  Do staple attachments
-  Don't remove originals
-  Do explain abbreviations and special terms
-  Do provide detail
-  Do outline new experiments
-  Do keep a complete log of your activities
-  Do track notebooks
-  Do save completed notebooks
-  Do use past tense

How does this may apply to your organization?



-  In an ideal situation **every R&D worker** should maintain his **own personal lab notebook**.
-  **Some departments** are **more unlikely** than other to **generate patentable** subject matter.
-  **Some departments'** way of working is **not easily compatible** with personal hand-written notebooks (microbiology, analysis).
-  All other departments should implement personal notebook guaranteeing that, at least, a detailed log of the book owner's activities is recorded with cross-reference to the information not part of the notebook.
-  **All electronic information** should be **printed out in paper** which can be dated, signed and counter-signed.

Notebooks' physical requirements

- All **pages** must be **numbered**
- Pages must be **permanently bound** (spiral not enough)
- Notebooks may be prenumbered
- Heading to contain space for:
 - Project identification
 - Title
 - Identification of preceding page
- **Footnotes** to include:
 - Name of **experimenter**, **signature and date**
 - Name of **witnesses**, **signatures and dates**

Diario de laboratorio

99

Título _____ Proyecto _____

De la página No. _____

A la página No. _____

Registrado por: _____	Fecha _____	Leído y entendido por: _____	Fecha _____
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All pages must be numbered

Pages must be permanently bound (spiral not enough)

Project identification

Title

Identification of preceding page

Name of experimenter, signature and date

Name of witnesses, signatures and dates

The Notebook's use instructions

Instrucciones sobre la forma

Organización de la información

En el índice del diario se debe hacer referencia a cada experimento, indicando su título y las páginas donde se encuentra la información correspondiente.

El diario debe seguir un orden cronológico. Si un experimento tiene que ser interrumpido para realizar otro se deben establecer referencias cruzadas entre la página en la que se interrumpió y la página en la que se retoma.

Firmar y fechar

Se debe anotar en la primera página la fecha en la que se empezó a utilizar el diario.

Cada una de las páginas del diario debe ser firmada y fechada al final del día en que se completa.

Un testigo independiente, es decir, alguien que entendiendo la tecnología no vaya a ser nombrado co-inventor en la invención, debe firmar y fechar cada página después de la frase "Leído y entendido por _____".

Aunque lo óptimo es que el testigo firme las páginas a medida que se completan es aceptable que el proceso de repaso y firma tenga lugar una vez por semana.

Usar tinta indeleble

Se debe escribir con tinta indeleble y las anotaciones no deben ser borradas o tapadas.

Para corregir un error se traza una línea cruzando el texto erróneo, de modo que éste pueda ser leído, y el texto corregido se anota en el siguiente espacio disponible.

No dejar espacios en blanco

Cada experimento debe comenzar en una página nueva. Los espacios en blanco que queden entre el final de un experimento y el comienzo de otro se deben eliminar con una línea o una cruz.

No modificar con posterioridad

Los experimentos (y los datos) se deben anotar en la fecha en la que se realizan (o se obtienen).

Las anotaciones correspondientes no deben modificarse en fechas posteriores, incluso si se detecta que se omitieron datos o que se anotaron datos erróneos. Los nuevos datos o los datos modificados se anotan en la página correspondiente a la fecha en la que se detectan y se hace una referencia cruzada a la página donde están los datos originales.

Si el motivo de la modificación de los datos no es obvio deberá explicarse para evitar sospechas de ocultación.

Anexos

Los datos que por cualquier razón no se puedan anotar directamente en el diario, por ejemplo los generados por instrumentos, deben preferiblemente unirse de forma permanente (grapándolos) al diario.

Cuando a una página del diario se grape un anexo, éste debe firmarse y fecharse de modo que la firma abarque a la vez la página del diario y el anexo.

En el caso de que el anexo no pueda ser grapado, debe ser colocado en un sobre que se grapará al diario. En el sobre se debe describir el contenido del anexo que se va a situar dentro del mismo. El sobre y la página deben fecharse, atestiguar y firmarse, de modo que la firma abarque a la vez la página del diario y el anexo.

Es recomendable identificar el espacio de la página que ocupará el anexo (o el sobre que lo contendrá) con una descripción del contenido del anexo. De este modo si el anexo se extravía quedará constancia de su contenido.

Como última alternativa, si por razones de volumen, u otras, no es posible anexas los datos al diario, debe anotarse en éste al menos dónde pueden ser localizados los datos.

No eliminar los originales

Las páginas del diario no deben, bajo ningún concepto, ser arrancadas. Es asimismo recomendable no desgrapar los anexos (o los sobres que los contienen en su caso).

Instrucciones sobre el contenido

Explicar las abreviaturas, acrónimos y términos especiales

Utilizar términos comúnmente aceptados, evitando en la medida de lo posible las abreviaturas, los códigos, las marcas registradas y los nombres comerciales.

Si se utilizan, explicar las abreviaturas, los códigos y los términos que no son estándar. Para los términos no estándar de uso habitual es recomendable elaborar un glosario al empezar el diario.

Proporcionar detalles de los hechos

Describir los experimentos con detalle, incluyendo las circunstancias de funcionamiento preferidas, las condiciones de control, los rangos operativos preferidos, los materiales, los resultados de los ensayos, una explicación de los mismos, fotos o esquemas de los resultados y de los dispositivos utilizados.

Si se utilizan procedimientos estándar que no se describen con detalle en el diario, se debe hacer referencia a la fuente donde se encuentre una descripción completa.

Proporcionar notas explicativas suficientes para identificar y explicar el contenido de los esquemas, los gráficos y las fotos.

Cualquier conclusión debe ser corta y basada en los datos.

Sólo se deben sacar conclusiones científicas basadas en lo que fue hecho y realmente observado y no en lo que uno cree que se debería haber hecho o haber observado.

Se deben evitar las opiniones o las especulaciones sobre la invención, especialmente expresiones del tipo "el experimento falló (o funcionó)", "la idea es obvia", etc.

Resumir los experimentos

Cada nuevo proyecto o experimento se debe comenzar en una página nueva, asignarle un título y resumir el objetivo y el fundamento del mismo (p.ej., en un párrafo corto o proporcionando un diagrama de flujo). Esto ayudará a evitar la especulación futura acerca del porqué fueron realizados los experimentos.

Anotar las discusiones de las reuniones técnicas

Las discusiones relevantes de reuniones técnicas deben ser anotadas, al igual que las ideas o las sugerencias hechas por otros. Los nombres de las personas que dan ideas y sugerencias deben ser documentados cuidadosamente.

Esta información puede ser importante para establecer quién realizó (o contribuyó a realizar) la invención.

No temer escribir demasiado

El diario de laboratorio debe constituir un registro completo de lo que se ha hecho.

Cuanto más detalles se den, mayores probabilidades existen de poder probar con éxito que se fue el "primero en inventar" si un tercero intenta patentar la invención en los Estados Unidos.



Experience Litigating “Date of Invention” in US Tribunals; Recent US Case Law on Inventorship

David Loretto, Ph.D.
U.S. Patent Attorney
ABG Patentes

Overview

- Experience Litigating “Date of Invention” in US Tribunals:
 - Defending against AT&T ‘335 in *US District Court, Private Arbitration* and *US International Trade Commission*
 - Notebooks show IBM 5,760,475 (priority claim to *March 30, 1987*) is 102(g)(2) prior art against AT&T ‘335 (priority claim to *Nov. 10, 1986*)
- Recent US Case Law on Inventorship:
 - *University of Pittsburgh v. Hedrick*, 573 F.3d 1290 (Fed. Cir. 2009) – conception does not require “scientific certainty”
 - *Nartron Corp. v. Schukra U.S.A., Inc.*, 558 F.3d 1352 (Fed. Cir. 2009) – inventor must contribute more than prior art
 - *IBEP v. Amgen, Inc.*, 475 F.3d 1256 (Fed. Cir. 2007) – co-inventor’s transfer of rights can remove standing to sue

United States Patent [19]

Holschwandner et al.

[11] Patent Number: 5,227,335

[45] Date of Patent: Jul. 13, 1993



Fundamental Semiconductor Process Patent; *Frequently Asserted* by AT&T and Successors

TUNGSTEN METALLIZATION

Inventors: Lowell H. Holschwandner, Fountain Hill; Virendra V. S. Rana, South Whitehall Township, Lehigh County, both of Pa.

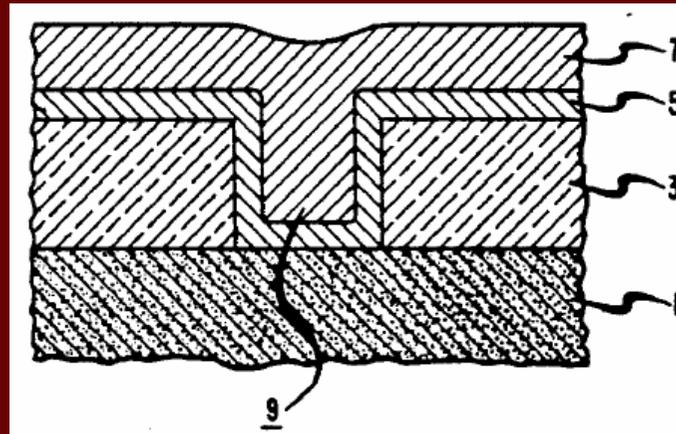
Assignee: AT&T Bell Laboratories, Murray Hill, N.J.

Appl. No.: 517,973

Filed: Apr. 30, 1990

Related U.S. Application Data

Continuation of Ser. No. 338,473, Apr. 14, 1989, abandoned, which is a continuation of Ser. No. 929,043, Nov. 10, 1986, abandoned.



US Courts

2001-06

2008-present

Private Arbitrations

2006-07, ??

US ITC

2008-present

United States Patent [19]

Cronin et al.

[11] Patent Number:

5,760,475

[45] Date of Patent:

Jun. 2, 1998



IBM '475 issues in 1998, describes the invention in AT&T '335, *but priority date is later* than November 1986 date of AT&T '335

REFRACTORY METAL-TITANIUM NITRIDE CONDUCTIVE STRUCTURES

Inventors: **John Edward Cronin**, Milton; **Carter Welling Kaanta**, Colchester; **Michael Albert Leach**, Bristol; **Pei-ing Paul Lee**, Williston, all of Vt.

Assignee: **International Business Machines Corporation**, Armonk, N.Y.

Appl. No.: **339,317**

Filed: **Nov. 14, 1994**

Related U.S. Application Data

Continuation of Ser. No. 965,031, Oct. 21, 1992, abandoned, which is a continuation of Ser. No. 722,396, Jun. 19, 1991, abandoned, which is a continuation of Ser. No. 31,808, **Mar. 30, 1987**, abandoned.

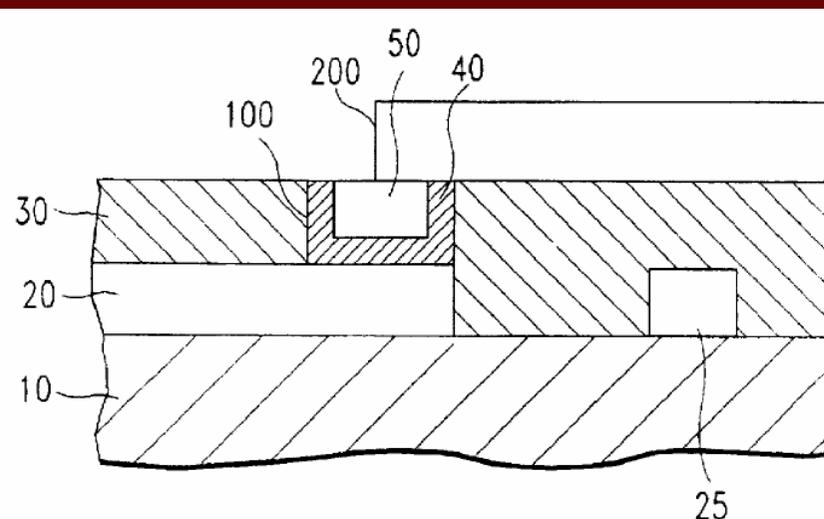


FIG. 1

“before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it.” 102(g)(2)....

United States Patent [19]

Cronin et al.

[11] Patent Number:

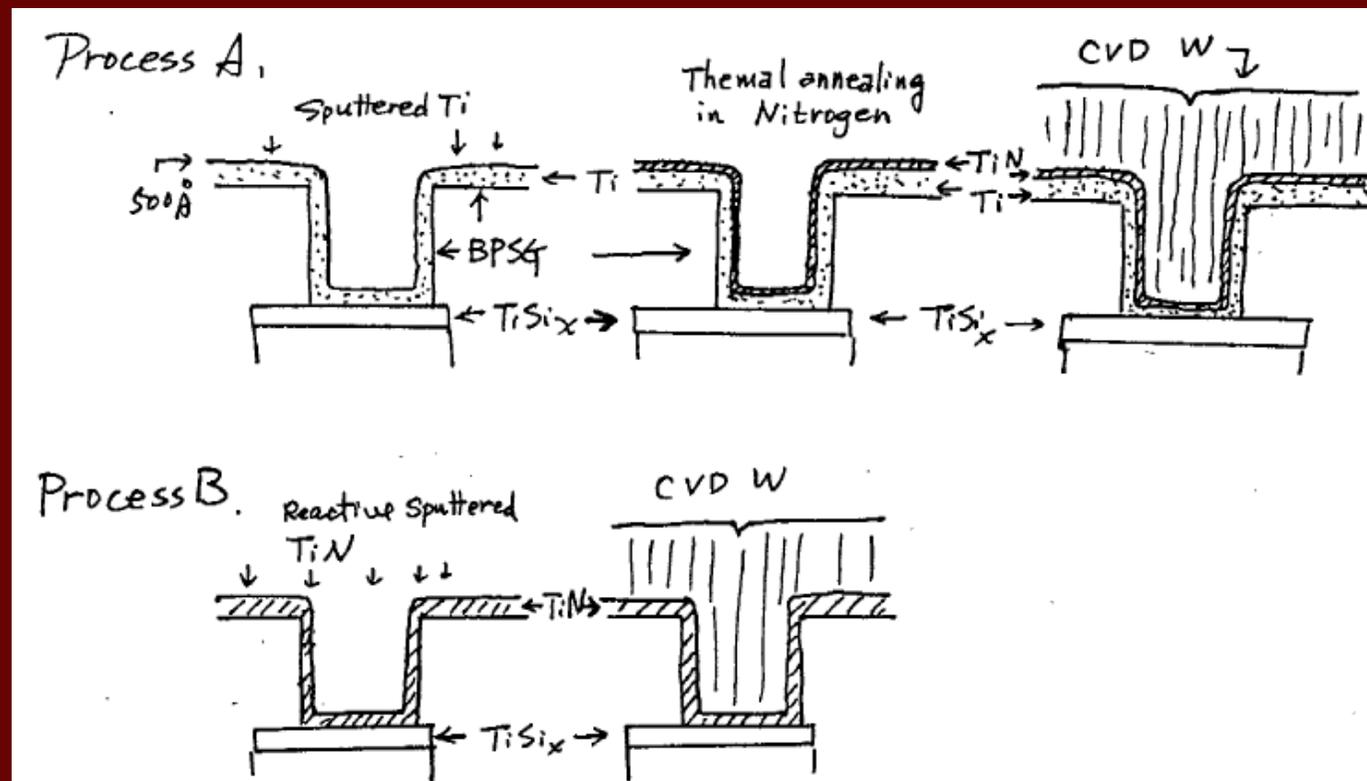
5,760,475

[45] Date of Patent:

Jun. 2, 1998



But notes in '475 file history show *Oct 1985 reduction to practice*, 17 months before filing (constructive reduction to practice) and 11 before AT&T '335; issue was whether IBM “*had not abandoned, suppressed, or concealed*”



AT&T '335 – The Patent That Won't Die

- *Agere v. Atmel, U.S. District Court*, E.D. Pa. (2003-06):
 - Agere (AT&T successor) sues Atmel on four patents, including AT&T '335
 - Inventors Rana (AT&T) and Cronin (IBM) testify at trial
 - Jury enters verdict that AT&T '335 invalid over prior art, including IBM '475
 - Judge affirms
 - Cases settles and *non-final judgment vacated*
- *Agere v. Rohm, private arbitration* (2006-07)
 - Arbitration pursuant to licensing agreement
 - Multiple patents
 - Cronin testifies at arbitration
 - Arbitrator rules AT&T '335 *invalid* over IBM '475 *or not infringed* by Rohm

AT&T '335 – The Patent That Won't Die

— *Agere and LSI v. 23 Respondents before U.S. International Trade Commission*, Washington D.C. and *E.D. Tex.* (2008-present):

- Seven respondents remain at July 2009 hearing (all but one of remainder settle)
- IBM inventors Cronin and Lee testify
- September 2009, ALJ enters initial determination that all asserted claims *invalid over IBM '475*
- Commission reverses and remands on issue of *validity of single dependent claim*
- January 2010, ALJ enters findings of infringement of single dependent claim
- Issue of remedies being briefed/heard
- Patent expires in July 2010; *Can ITC exclusion order issue in time?* (Back to E.D. Tex. for damages?)

University of Pittsburgh – Conception Does Not Require Scientific Certainty



Patent for *isolated stem cells derived from human fat* tissue; University of Pittsburgh is actual assignee (despite University of California being listed on face)

United States Patent
Katz et al.

(10) **Patent No.:** US 6,777,231 B1
(45) **Date of Patent:** Aug. 17, 2004

ADIPOSE-DERIVED STEM CELLS AND LATTICES

Inventors: **Adam J. Katz**, Charlottesville, VA (US); **Ramon Llull**, Mallorca (ES); **William J. Futrell**, Pittsburgh, PA (US); **Marc H. Hedrick**, Encino, CA (US); **Prosper Benhaim**, Los Angeles, CA (US); **Hermann Peter Lorenz**, Los Angeles, CA (US); **Min Zhu**, Los Angeles, CA (US)

Assignee: **The Regents of the University of California**, Oakland, CA (US)

• Independent claims:

1. An isolated adipose-derived stem cell that can differentiate into two or more of the group consisting of a bone cell, a cartilage cell, a nerve cell, or a muscle cell.
2. An isolated, adipose-derived multipotent cell that differentiates into cells of two or more mesodermal phenotypes.
3. An isolated adipose-derived stem cell that differentiates into two or more of the group consisting of a fat cell, a bone cell, a cartilage cell, a nerve cell, or a muscle cell.
4. An isolated adipose-derived stem cell that differentiates into a combination of any of a fat cell, a bone cell, a cartilage cell, a nerve cell, or a muscle cell.

University of Pittsburgh – Conception Does Not Require Scientific Certainty



- 1996 – Katz and Lull at University of Pittsburgh begin working on cells derived from human adipose tissues (fat)
- April 1997 – Katz and Lull realize *and describe in laboratory notebooks and elsewhere* how the cells can differentiate into bone, cartilage, fat and muscle cells, and into cells *resembling* nerve cells
- June 1997 to June 1998 – Hedrick from the University of California visits Pittsburgh laboratory
- June 1998 – Hedrick returns to California to continue work on Pittsburgh cells with Benhaim and Lorenz, later joined by Zhu
- 1999 – University of Pittsburgh files two provisional patent applications with Katz, Lull, Futrell and Hedrick as co-inventors

University of Pittsburgh – Conception Does Not Require Scientific Certainty



- 2000 – Hedrick files invention disclosure in U.C.; and Pittsburgh files PCT claiming priority from provisional apps with seven inventors
- October 2004 – University of Pittsburgh files in Ca. C.D. *section 256 action* to remove all ‘ 231 inventors except Katz and Llull
- June 2008 – Judge, *relying on laboratory notebooks* and other contemporaneous evidence, rules Katz and Llull had conceived invention in April 2007, before Hedrick’s fellowship; *orders Hedrick and others removed*; no deceptive intent, so patent still valid
- July 2009 – Fed. Cir. affirms, since Llull and Katz, in April 1997: “While *not scientifically certain* that they were observing a nerve cell, ...*had the firm and definite idea* that nerve cells were present” sufficient to inform one of ordinary skill of their invention

35 U.S.C. § 256 Correction of Named Inventor



- Whenever through error a person is named in an issued patent as the inventor, or through error an inventor is not named in an issued patent *and such error arose without any deceptive intention on his part*, the Director may, on application of all the parties and assignees, with proof of the facts and such other requirements as may be imposed, issue a certificate correcting such error.
- The error of omitting inventors or naming persons who are not inventors *shall not invalidate the patent in which such error occurred if it can be corrected* as provided in this section.

Nartron Corp. – Inventor Must Contribute More Than Prior Art



United States Patent [19]

Newman et al.

[11] **Patent Number:** **6,049,748**

[45] **Date of Patent:** **Apr. 11, 2000**

MESSAGE CONTROLLER MODULE (MCM)

Inventors: **Todd Newman**, Reed City; **David Shank**, Big Rapids; **John Washeleski**, Cadillac, all of Mich.

Assignee: **Nartron Corporation**, Reed City, Mich.

Appl. No.: **08/936,479**

Filed: **Sep. 18, 1997**

1. A seat control module for introducing massage to a seat control with an adjustable lumbar support, and control actuators, the control module comprising:

- a modular housing including in-line connectors for coupling said module to a seat control harness connector;
- an intercept interface for receiving inputs from said control actuators;
- a driver for repeatedly adjusting said lumbar support position through a predetermined range of movement in response to one of said control actuators; and
- a transparency simulator for maintaining full function of said seat control and removing indications of repeatedly adjusting said lumbar support position.

- Benson's sole contribution: **11. The invention as defined in claim 6 wherein said lumbar support adjustor includes an extender.**

Nartron Corp. – Inventor Must Contribute More Than Prior Art



- 2006 – Nartron sues Borg Indak, supplier of electronic components to Schukra – a manufacturer of lumbar support systems that had contracted Nartron for work that led to the '748 patent – for contributory infringement
- Borg Indak moves to *dismiss for failure to join a necessary party* (i.e., for lack of standing), Schukra employee Benson, purported co-inventor on the basis of his contribution of the extender of claim 11
- 2008 – Despite extender being known from prior art, E.D. Mich. grants motion to dismiss for failure to add co-inventor Benson
- 2009 – Fed. Cir. reverses: Benson's *addition of a prior art feature was insignificant in terms of the invention* of claims 11, 6, 5 and 1, so he cannot be a co-inventor

IBEP – Even With Correct Inventorship Co-Inventor Can Block Suit



United States Patent Wallach et al.

(10) Patent No.: **US 6,479,632 B1**
(45) Date of Patent: ***Nov. 12, 2002**

TUMOR NECROSIS FACTOR INHIBITORY PROTEIN AND ITS PURIFICATION

Inventors: **David Wallach**, Rehovot (IL);
Hartmut Engelmann, Munich (DE);
Dan Aderka, Holon; **Menachem**
Rubinstein, Givat Schmucl, both of
(IL)

Assignee: **Yeda Research and Development Co.
Ltd.**, Rehovot (IL)

Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

Appl. No.: **09/414,609**

Filed: **Oct. 8, 1999**

Related U.S. Application Data

Division of application No. 08/474,691, filed on Jun. 7,
1995, now Pat. No. 5,981,701, which is a division of
application No. 07/876,828, filed on Apr. 30, 1992, now Pat.
No. 5,695,953, which is a continuation of application No.
07/243,092, filed on Sep. 12, 1988, now abandoned.

Rubinstein and
Englemann's
invention; *not
assigned to IBEP*

2. **A pharmaceutical composition** for use in treating con-
ditions where TNF, either endogenously formed or exog-
enously administered, is to be eliminated from the body or
its effect in the body is to be antagonized, comprising a
protein or fragment thereof in accordance with claim 1 and
a pharmaceutically acceptable carrier.

3. **A substantially purified molecule** capable of inhibiting
the binding of TNF to cells and of inhibiting the cytotoxic
effect of TNF, wherein said molecule comprises a polypep-
tide having the sequence of a protein obtainable from human
urine and having the following features:

IBEP – Even With Correct Inventorship Co-Inventor Can Block Suit



- Israel Bio-Engineering Project obtained rights to inventions made at the Weizmann Institute between 1982 and 1987
- Claims 2 and 3 of '701 patent* based on discoveries made by co-inventors Engelmann and Rubinstein after 1988: under terms of five-year contract signed in 1982, *not assigned to IBEP*
- 2002 – IBEP sues Amgen and others in C.D. Ca. alleging product for treating rheumatoid arthritis and psoriasis infringes '701 patent
- 2005 – *after appeal and remand*, C.D. Ca. *dismisses for lack of standing by IBEP*
- 2007 – Fed. Cir. affirms

IBEP – Even With Correct Inventorship Co-Inventor Can Block Suit

- A *co-inventor of even one claim has co-ownership of entire patent*
- A single co-owner *can stop other co-owners from suing* for patent infringement
- Looking beyond *IBEP*, *lack of standing for divided ownership* can occur in ways unrelated to co-inventorship – e.g., can be unintended consequence of tax avoidance scheme – and, like in *IBEP*, *can be difficult to fix* – e.g., in bankruptcy proceedings where creditors' interests are rarely aligned

Conclusions

- Winning a contest over date of invention requires contemporaneous documentation and corroboration, i.e., *laboratory notebooks*
- Conception does not require scientific certainty* on the part of the inventor (*University of Pittsburgh*)
- In the absence of deceptive intent, *inventorship can be corrected without invalidating the patent* (35 U.S.C. § 256)
- Adding single, *insignificant limitation from the prior art will not confer co-inventorship* (*Nartron Corp.*)
- Co-ownership follows from co-inventorship, so even if inventorship is correct, *co-ownership can remove ability to sue*, and can be *impossible to fix* (*IBEP*)



Gracias por su atención

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