Patent-disclosure meetings:
A 'one and done' approach*

** Mostly*

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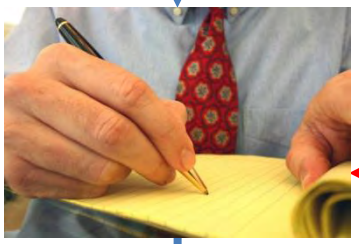
The traditional approach

Inventor presentation



Attorney note-taking

No

Attorney drafting

Inventor review

Ready?

Yes

File pat app

Three frequent dislikes:

The time required …

the cost …

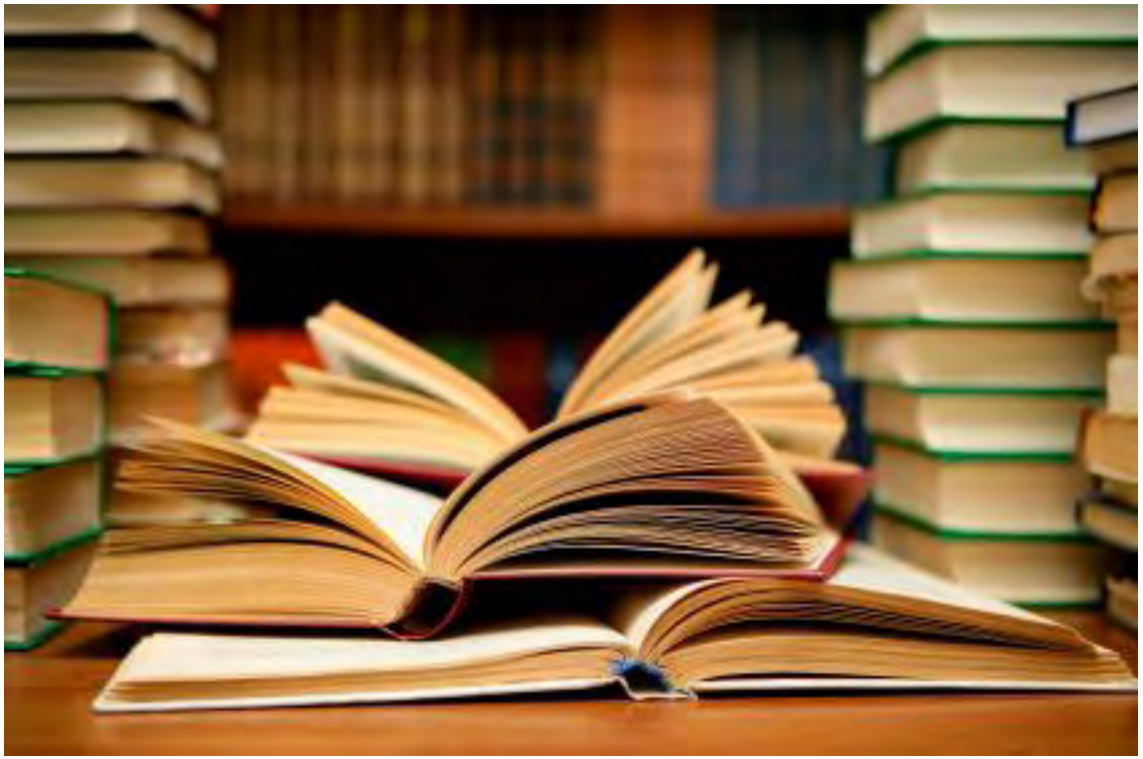
the inventor frustration

What causes these dislikes?

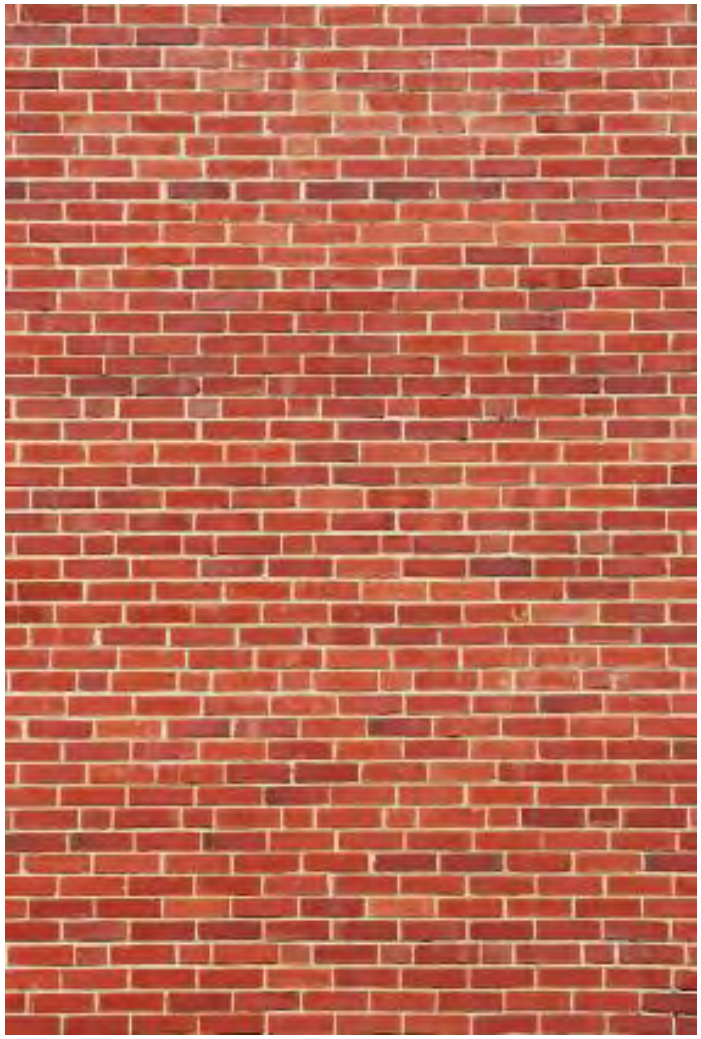
1. The invention is a technical advance… *(presumably)*

2. …but the lawyer is a *lawyer*

(and so must play 'catch-up')



3. And, everyone's busy



Not much we can do about these issues.

Let’s focus on three other causes

4. Inventors' presentations aren't always well-organized

5. Attorney's notes are likely to be incomplete …

… prompting follow-up calls …

… and inventors aren't always thrilled to be interrupted

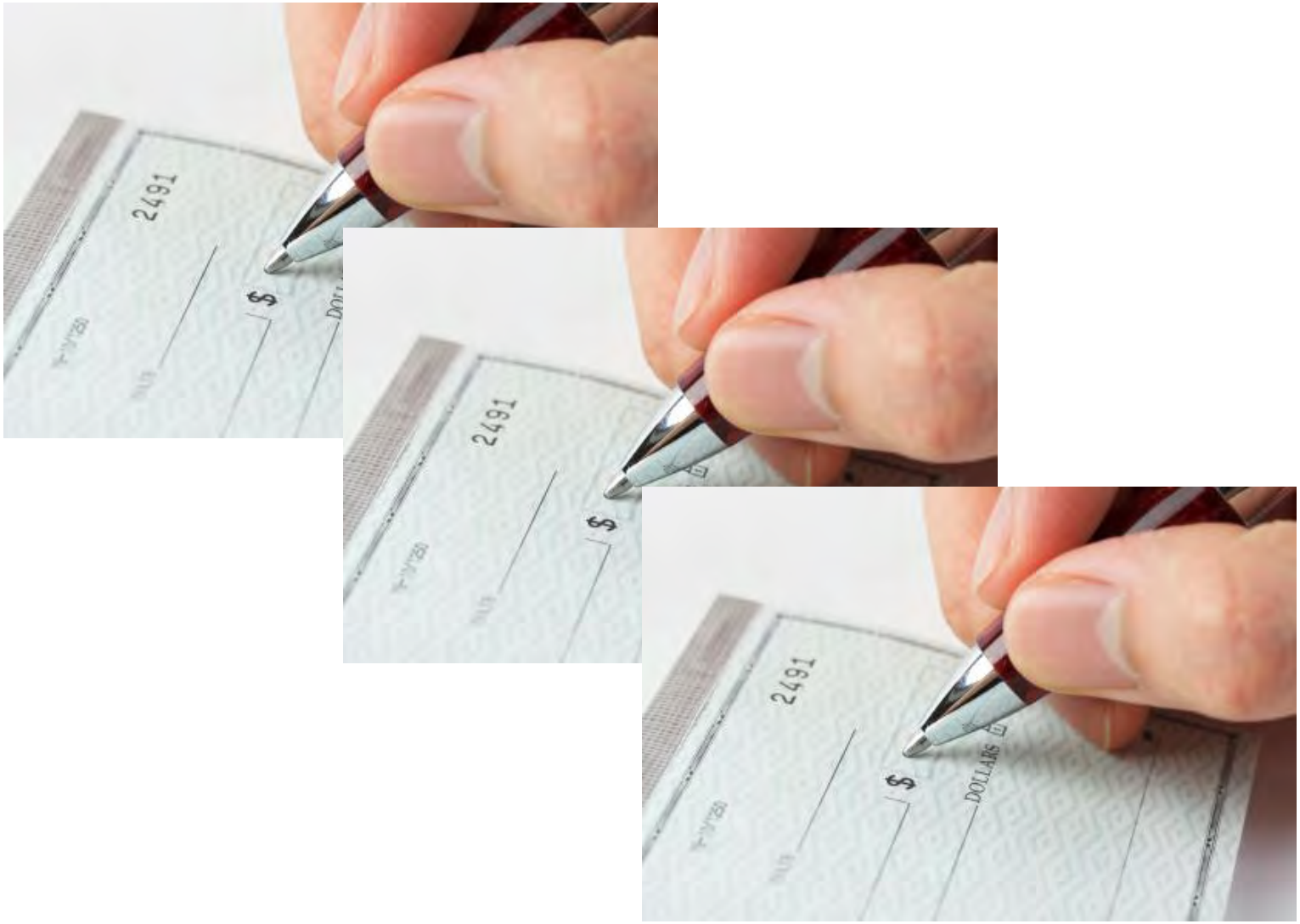
6. Attorney doesn't want to risk leaving out anything important …

… so, drafts a ‘dissertation’ …

… which needs more editing by the inventors …

… increasing the time required …

… and the cost …



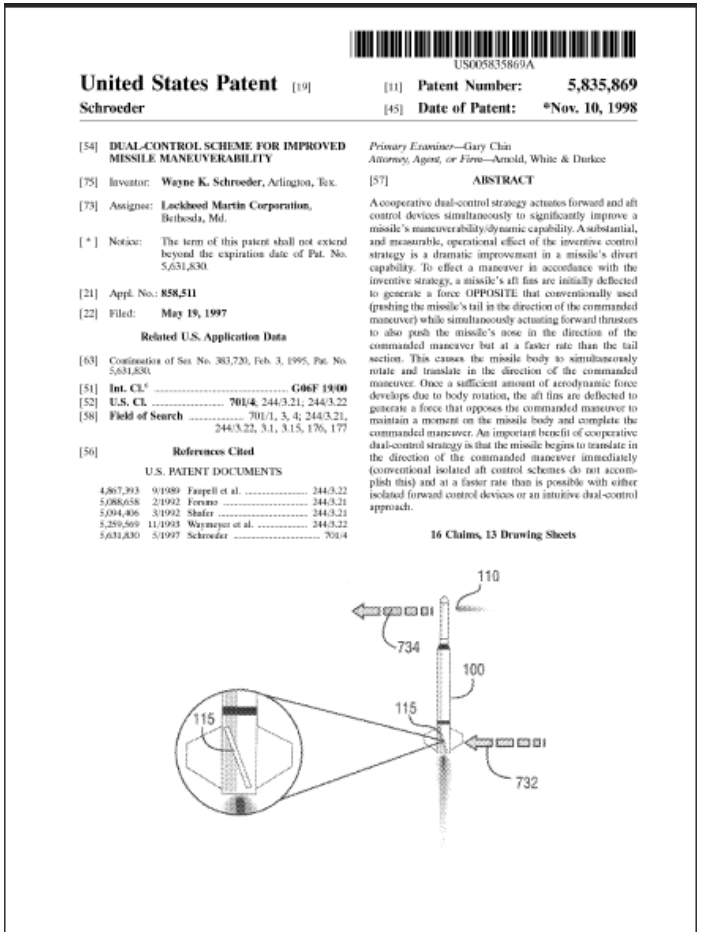
… and the inventors' frustration

There is a better way

‘Proof of concept’ example

U.S. Patent No. 5,631,830:
Dual-control scheme for improved missile maneuverability

Assignee:
Lockheed Martin Corp.
(no endorsement implied)



US005835869A

United States Patent [19]
Schroeder

[11] **Patent Number: 5,835,869**
[45] **Date of Patent: *Nov. 10, 1998**

[54] **DUAL-CONTROL SCHEME FOR IMPROVED MISSILE MANEUVERABILITY**

[75] Inventor: **Wayne K. Schroeder**, Arlington, Tex.

[73] Assignee: **Lockheed Martin Corporation**, Bethesda, Md.

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,631,830.

[21] Appl. No.: **858,511**

[22] Filed: **May 19, 1997**

Related U.S. Application Data

[63] Continuation of Ser. No. 383,720, Feb. 3, 1995, Pat. No. 5,631,830.

[51] **Int. Cl.**[6] **G06F 19/00**
[52] **U.S. Cl.** **701/4**; 244/3.21; 244/3.22
[58] **Field of Search** 701/1, 3, 4; 244/3.21, 244/3.22, 3.1, 3.15, 176, 177

[56] **References Cited**

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4,867,393	9/1989	Faupell et al.	244/3.22
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5,631,830	5/1997	Schroeder	701/4

Primary Examiner—Gary Chin
Attorney, Agent, or Firm—Arnold, White & Durkee

[57] **ABSTRACT**

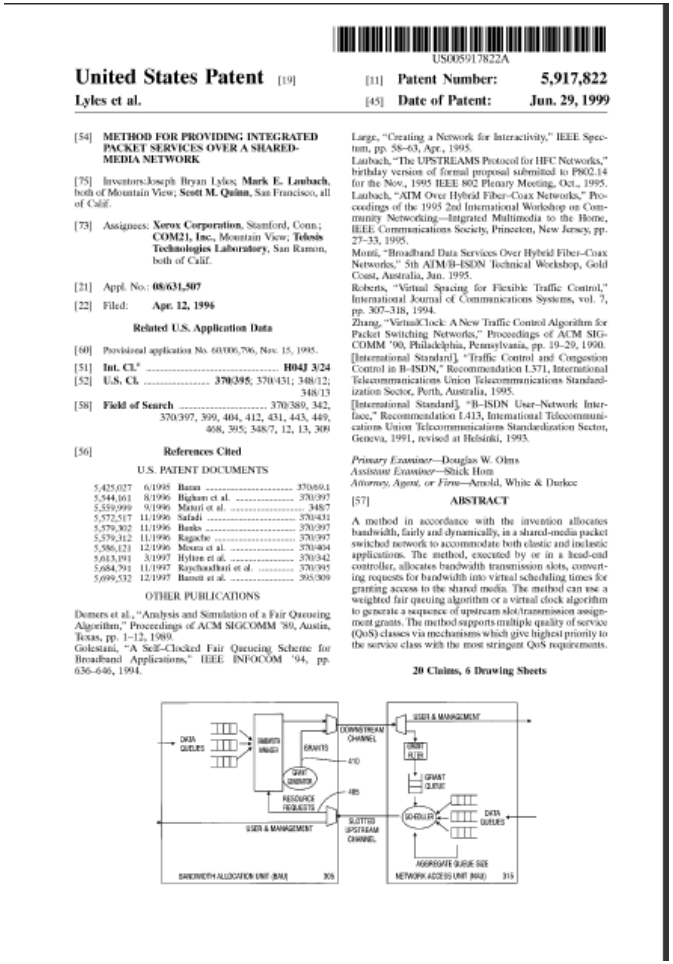
A cooperative dual-control strategy actuates forward and aft control devices simultaneously to significantly improve a missile's maneuverability/dynamic capability. A substantial, and measurable, operational effect of the inventive control strategy is a dramatic improvement in a missile's divert capability. To effect a maneuver in accordance with the inventive strategy, a missile's aft fins are initially deflected to generate a force OPPOSITE that conventionally used (pushing the missile's tail in the direction of the commanded maneuver) while simultaneously actuating forward thrusters to also push the missile's nose in the direction of the commanded maneuver but at a faster rate than the tail section. This causes the missile body to simultaneously rotate and translate in the direction of the commanded maneuver. Once a sufficient amount of aerodynamic force develops due to body rotation, the aft fins are deflected to generate a force that opposes the commanded maneuver to maintain a moment on the missile body and complete the commanded maneuver. An important benefit of cooperative dual-control strategy is that the missile begins to translate in the direction of the commanded maneuver immediately (conventional isolated aft control schemes do not accomplish this) and at a faster rate than is possible with either isolated forward control devices or an intuitive dual-control approach.

16 Claims, 13 Drawing Sheets

Another example

U.S. Patent No. 5,917,822:
Method for providing integrated packet services over a shared-media network

Assignee:
Xerox PARC (Palo Alto Research Center)
(no endorsement implied)



US005917822A

United States Patent [19]
Lyles et al.

[11] **Patent Number: 5,917,822**
[45] **Date of Patent: Jun. 29, 1999**

[54] **METHOD FOR PROVIDING INTEGRATED PACKET SERVICES OVER A SHARED-MEDIA NETWORK**

[75] Inventors: Joseph Bryan Lyles; **Mark E. Laubach**, both of Mountain View; **Scott M. Quinn**, San Francisco, all of Calif.

[73] Assignees: **Xerox Corporation**, Stamford, Conn.; **COM21, Inc.**, Mountain View; **Telesis Technologies Laboratory**, San Ramon, both of Calif.

[21] Appl. No.: **08/631,507**

[22] Filed: **Apr. 12, 1996**

Related U.S. Application Data

[60] Provisional application No. 60/000,706, Nov. 15, 1995.

[51] **Int. Cl.**[6] **H04J 3/24**

[52] **U.S. Cl.** **370/395**; 370/431; 348/12; 348/13

[58] **Field of Search** 370/380, 342, 370/397, 399, 404, 412, 431, 443, 449, 468, 395; 348/7, 12, 13, 309

[56] **References Cited**

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[International Standard], "B–ISDN User–Network Interface," Recommendation I.413, International Telecommunications Union Telecommunications Standardization Sector, Geneva, 1991, revised at Helsinki, 1993.

Primary Examiner—Douglas W. Olms
Assistant Examiner—Shick Hom
Attorney, Agent, or Firm—Arnold, White & Durkee

[57] **ABSTRACT**

A method in accordance with the invention allocates bandwidth, fairly and dynamically, in a shared–media packet switched network to accommodate both elastic and inelastic applications. The method, executed by or in a head–end controller, allocates bandwidth transmission slots, converting requests for bandwidth into virtual scheduling times for granting access to the shared media. The method can use a weighted fair queuing algorithm or a virtual clock algorithm to generate a sequence of upstream slot/transmission assignment grants. The method supports multiple quality of service (QoS) classes via mechanisms which give highest priority to the service class with the most stringent QoS requirements.

20 Claims, 6 Drawing Sheets

How it’s done

No notes (!)

Instead: Draft, ***<u>with</u> the inventors:***

- **starter claims,**

  plus

- **‘footnotes’ …**

… in person, or …

… via on-line screen sharing

skype™

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Three basic steps to walk the inventors through:

1. Ask: What would someone *pay for* …

… and focus on *that*

(to start with)

Technology focus:
"We came up with a neat way of inhibiting the activity of the Doo-Hickey enzyme in the human body."

vs.

'What would some-one pay for' focus:
"We've come up with a way of making a hay-fever medication that gives relief for up to 24 hours."

2. Outline a ‘business plan’ *as a method claim*

100. A method of relieving hay fever for an extended period of time, comprising:

(a) manufacturing a new decongestant compound;

(b) acquiring a spray bottle; *[etc., etc.]*

3. Expand the 'business plan' claim boundaries as much as the prior art will allow

100. A method of relieving ~~hay fever~~ nasal congestion **[1]** for an extended period of time, comprising:

[1] *Nasal congestion:* Nasal congestion could result from a variety of causes such as, for example, hay fever or a sinus infection.

… adding necessary details

(a) manufacturing a ~~new~~ decongestant compound comprising a mixture of powdered unicorn horn **[2]** and ground pepper; **[3]**

[2] *Unicorn horn:* A unicorn may be attracted by sprinkling chocolate chips on any convenient unicorn trail.

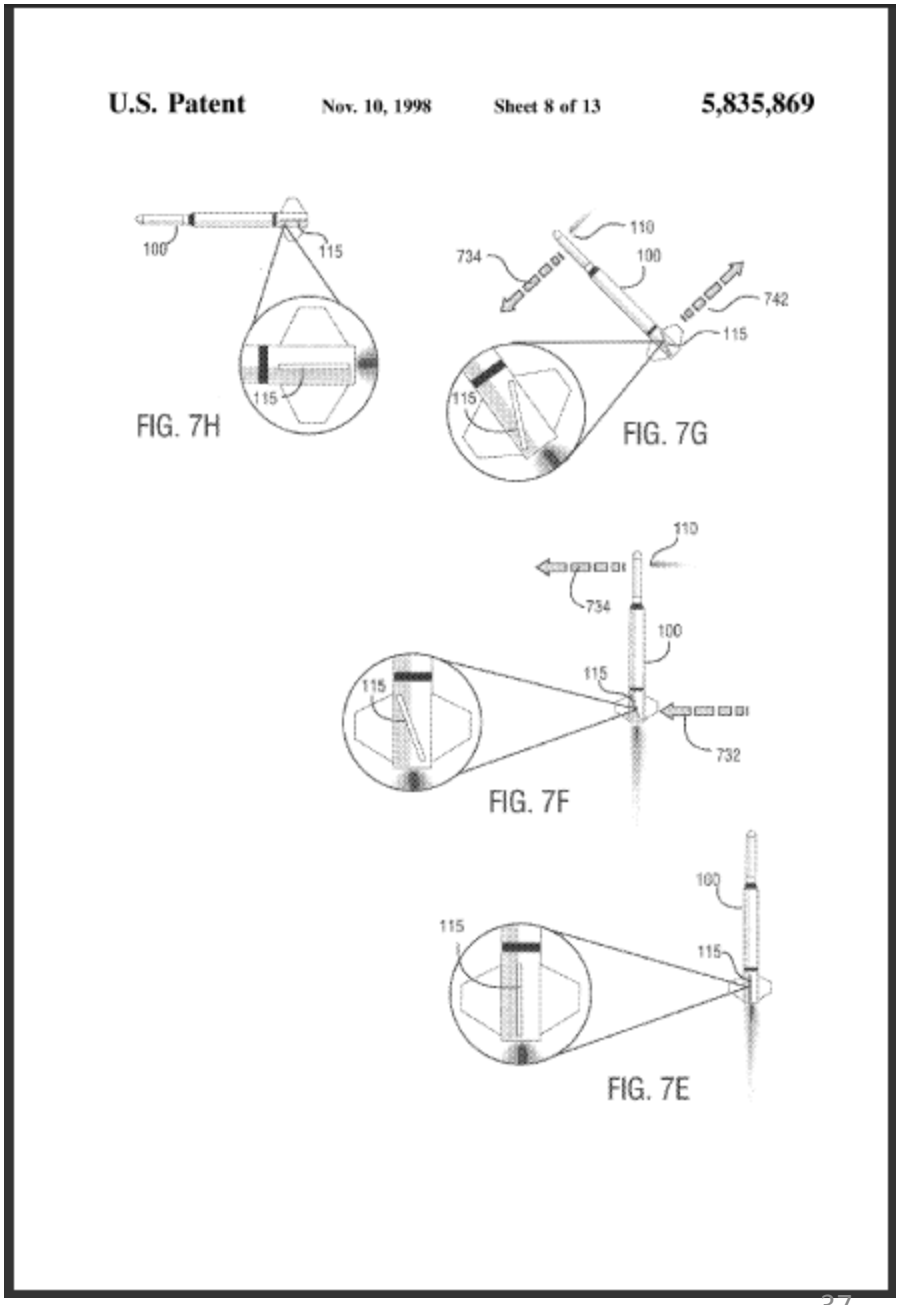
[3] *Ground pepper:* Cayenne pepper is preferred, but black pepper has also been found to work satisfactorily.

[Dependent claims can be useful]

110. The method of claim 100, wherein the ratio of powdered unicorn horn to ground pepper is in the range of 1:1 to 1:5. **[4]**

[4] *Ratio:* Proportions from 1:2 to 1:4 have been experimentally verified; proportions ranging from 1:1 to 1:5 are expected to work satisfactorily.

Sketch rough drawings; number the components:



Brainstorm w/ inventors:

- Do claims distinguish over prior art?
- Are claims targeted at what competitors will actually *do*?
- Any problems *proving* infringement?
- Future products / services? Licensing to other industries?

Repeat for other ‘business plan’ claims

Result:

A disciplined survey of ‘the invention’ …

… with immediate, on-the-fly inventor critique & feedback …

… that can easily be edited into a patent application

(Editing tip:

Copy the 'business plan' and 'footnotes' and tweak them into a prose narrative)

US005917822A

United States Patent [19] [11] **Patent Number: 5,917,822**

Lyles et al. [45] **Date of Patent: Jun. 29, 1999**

Referring to the data flow diagram in FIG. **4**, the method, executed by the head-end controller **105** (or other bandwidth allocation unit **305**), comprises:

(a) receiving a transmission authorization request **405** [4] from an identified terminal equipment **210** as illustrated in Lines **517** through **519** of Table 1 the transmission authorization request **405** being associated with a requested transmission;

(b) generating a virtual scheduling time [5] for the requested transmission, based on (1) the time of arrival of the transmission authorization request **405** [6], (2) a

* * *

4.2. Notes to Illustrative Method Description

* * *

[4] In an 802.14 type network, access to an upstream channel (e.g., from a terminal equipment **210** to the head-end controller **105**) will either be granted on a specific station basis (directed grant), on a contention basis (request grant), or for station registration purposes (acquisition grant). The specific type of grant **410** and when these are scheduled are managed directly by the head-end controller

Payoffs:

Inventors prefer this approach, because…

… an intense session now means less editing work later

Lawyers like the BIG head start on legal drafting

Applications get filed faster

(File a provisional application the same day, even)

Cost: Comparable, or better

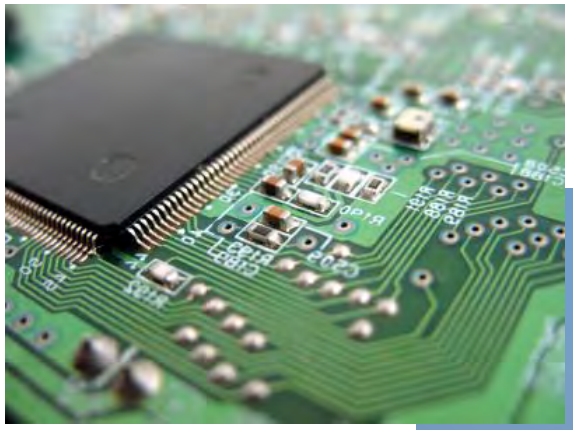
Good training vehicle for:

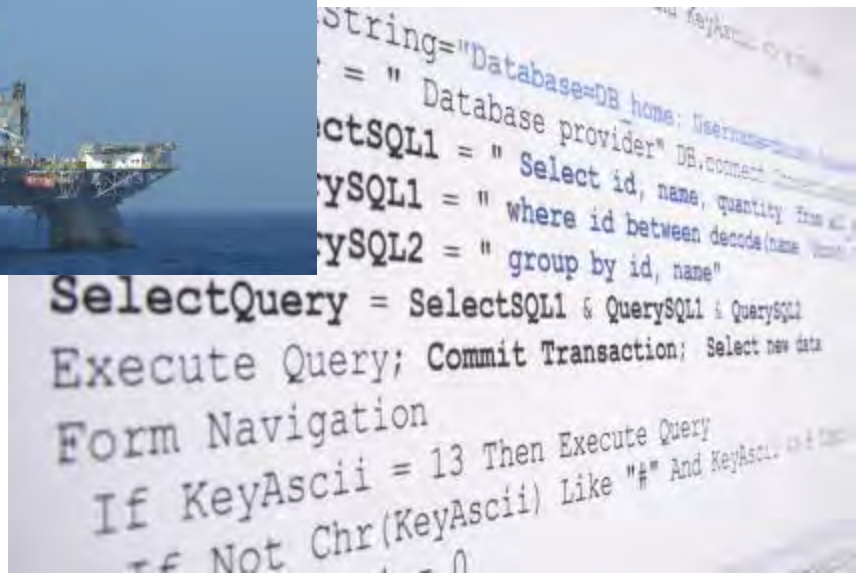
and

Junior attorneys, patent agents – ‘sit second-chair’

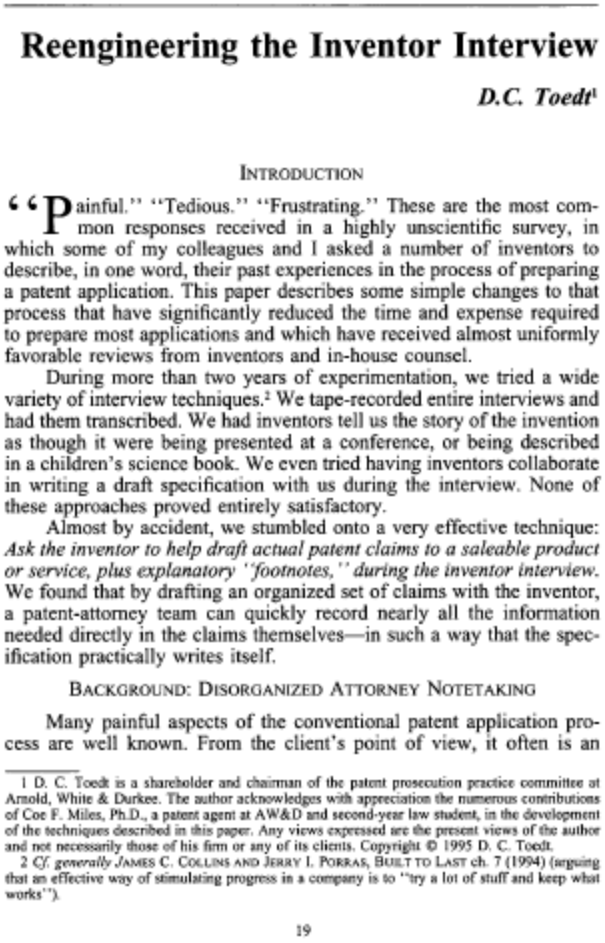
Invention-disclosure authors

Adaptable to different fields





Further reading



Reengineering the Inventor Interview

D.C. Toedt[1]

INTRODUCTION

"Painful." "Tedious." "Frustrating." These are the most common responses received in a highly unscientific survey, in which some of my colleagues and I asked a number of inventors to describe, in one word, their past experiences in the process of preparing a patent application. This paper describes some simple changes to that process that have significantly reduced the time and expense required to prepare most applications and which have received almost uniformly favorable reviews from inventors and in-house counsel.

During more than two years of experimentation, we tried a wide variety of interview techniques.[2] We tape-recorded entire interviews and had them transcribed. We had inventors tell us the story of the invention as though it were being presented at a conference, or being described in a children's science book. We even tried having inventors collaborate in writing a draft specification with us during the interview. None of these approaches proved entirely satisfactory.

Almost by accident, we stumbled onto a very effective technique: *Ask the inventor to help draft actual patent claims to a saleable product or service, plus explanatory "footnotes," during the inventor interview.* We found that by drafting an organized set of claims with the inventor, a patent-attorney team can quickly record nearly all the information needed directly in the claims themselves—in such a way that the specification practically writes itself.

BACKGROUND: DISORGANIZED ATTORNEY NOTETAKING

Many painful aspects of the conventional patent application process are well known. From the client's point of view, it often is an

1 D. C. Toedt is a shareholder and chairman of the patent prosecution practice committee at Arnold, White & Durkee. The author acknowledges with appreciation the numerous contributions of Coe F. Miles, Ph.D., a patent agent at AW&D and second-year law student, in the development of the techniques described in this paper. Any views expressed are the present views of the author and not necessarily those of his firm or any of its clients. Copyright © 1995 D. C. Toedt.

2 *Cf. generally* JAMES C. COLLINS AND JERRY I. PORRAS, BUILT TO LAST ch. 7 (1994) (arguing that an effective way of stimulating progress in a company is to "try a lot of stuff and keep what works").

19

Reengineering the Inventor Interview, in Journal of the Patent & Trademark Office Society, vol. 78, p. 19, http://goo.gl/WbHZ

For more information

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