
PATENTS IN THE FUTURE

Eric Kohli

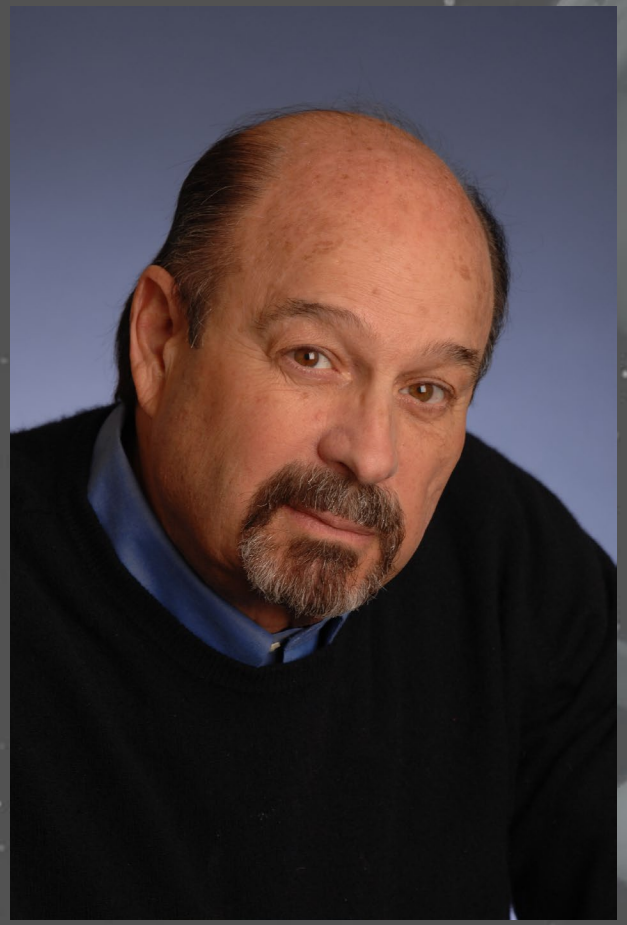
Eric is a registered patent lawyer with more than 20 years of experience in intellectual property law. Eric's practice has focused on advising a wide variety of clients, including Fortune 100 and Fortune 500 companies, through patent and trademark development, prosecution, enforcement, business agreements, licensing, and litigation.

Eric's patent practice includes technologies in the mechanical, electrical, electronics, software, business methods, mobile apps, automotive, culinary, apparel, and medical arts.

Saurabh Vishnubhakat

Saurabh is a Professor of Law and Director of the Intellectual Property & Information Law Program at the Benjamin N. Cardozo School of Law, and a Research Fellow at the Duke Law Center for Innovation Policy. He writes and teaches on intellectual property, administrative law, civil procedure, and remedies, especially from an empirical perspective.

Ron Laurie



Ron Laurie has worked in Silicon Valley for over forty years, initially as a computer programmer and systems engineer, and then as an intellectual property lawyer. In 2004, he co-founded Inflexion Point Strategy, LLC, an intellectual property investment bank engaged in buying, selling and investing in strategic IP assets and IP-intensive businesses.

Prior to launching Inflexion Point, Ron was a founding partner of Skadden Arps' Palo Alto office where he chaired the firm's IP Strategy and Transactions Group for six years. He was also a founding partner of Weil Gotshal's Silicon Valley office in 1991.

Ron was an IP litigator for ten years handling high-visibility patent, copyright, trade secret and trademark infringement cases in Federal and state courts, including representation of Hewlett Packard in its successful defense of the "look and feel" copyright infringement suit filed by Apple Computer against HP and Microsoft over the Macintosh user interface.

Bob Zeidman

Bob is the creator of the field of software forensics. He is the founder of Zeidman Consulting that offers engineering consulting to law firms regarding IP disputes and Software Analysis and Forensic Engineering Corporation, the leading provider of software IP analysis tools. He holds 25 patents.

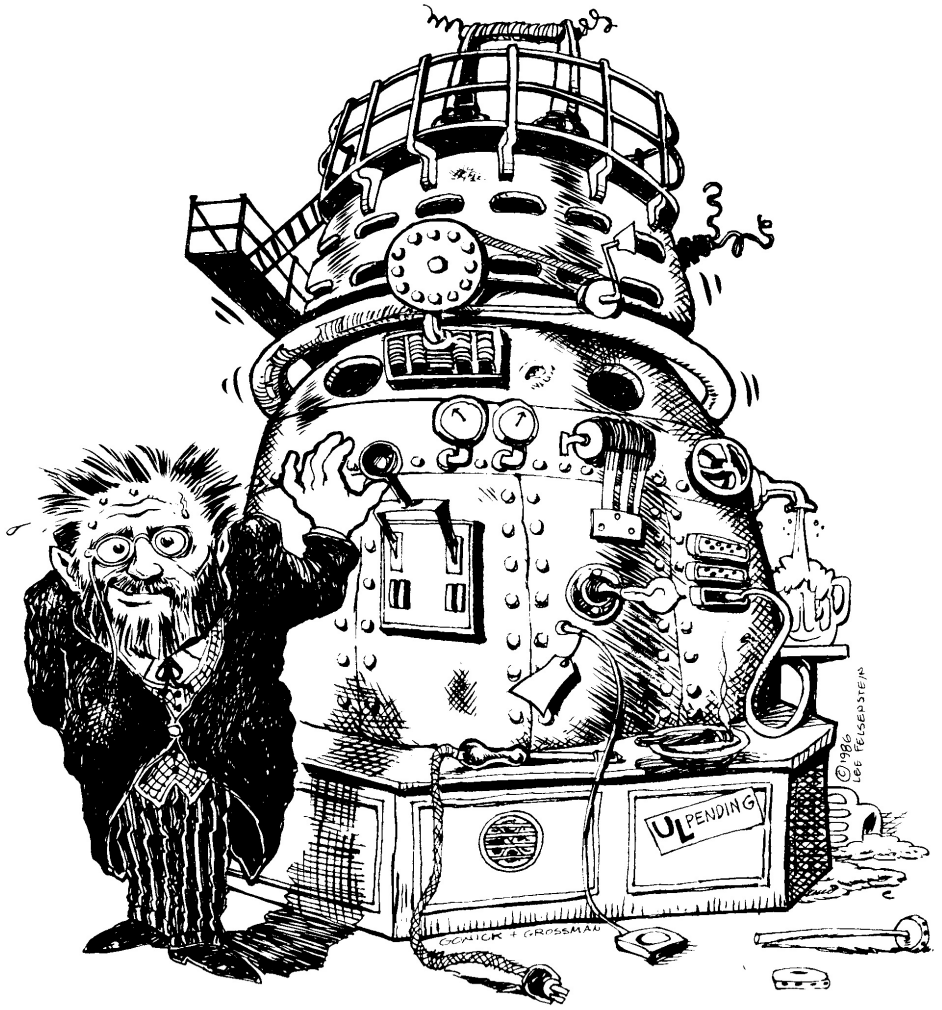
Bob is the author of three award-winning screenplays, four award-winning novels, and five textbooks. His latest venture is Good Beat Poker, an online poker site that incorporates patented audio and video technology.

He is also the author of *How to Invent a Time Machine*.

If Klingons invent a device, can the first Earthling to figure out how it works get a patent?

What is a Patent Given For?

- Any "new and useful" process, machine, manufacture, or composition of matter. √
- The invention must have a “utility.” √
- The invention must be “novel" (or new). √
- The invention must be "non-obvious" (meaning its use or function can't be something that is simply a logical step of an already patented invention). √



Prior Art

The invention must not have been "disclosed" to the public prior to the application for the patent. √

Who Gets a Patent?

- Anyone who discovers a new and useful
- process,
- machine,
- article of manufacture,
- compositions of matters, or
- an improvement thereof.

FAIL!

- The Earthling did not ‘invent or discover’ it
- he merely copied it (or reverse-engineered it) from the Klingons’ invention/discovery **X**

The Three Stages of the New Technology Development Process

Stage 1: Ideation

- What: Conception of the basic concept
- Where: In the mind of a human being (or other intelligent life form)

Stage 2: Invention

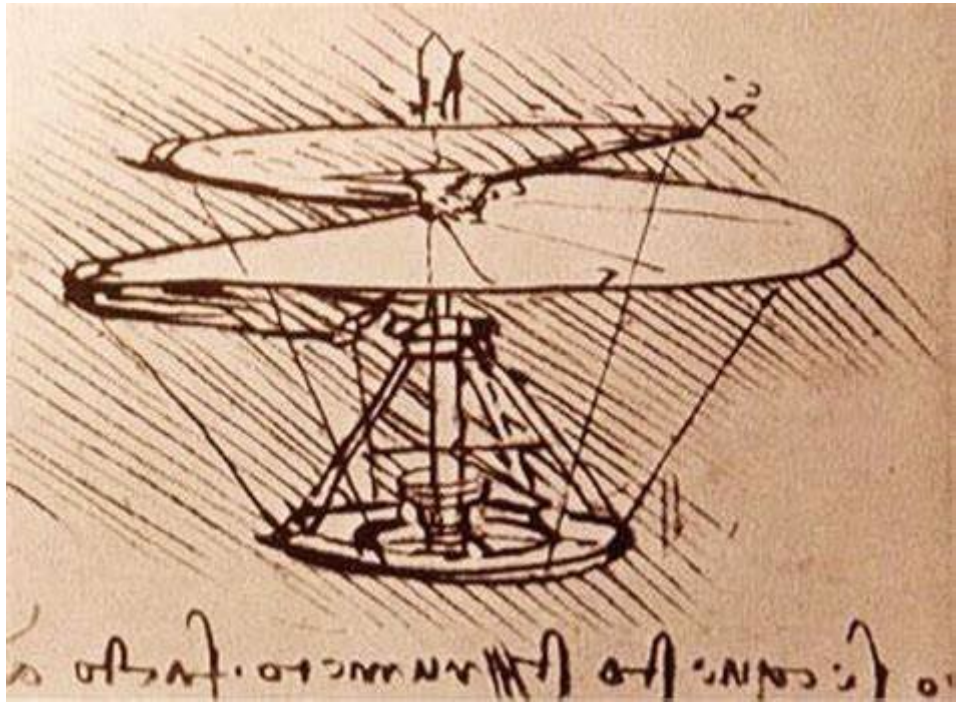
- What: Actual or Constructive “Reduction to Practice”
- How: Actual R/P (aka Proof of Concept)
  - building an operational prototype
  - performing a new process
  - creating a new material
  - etc., etc.
- What about computer simulations?
- Constructive R/P - filing a patent application
  - with sufficient technical detail
  - to enable a person of skill in the art
  - to replicate the predicted functionality
  - set forth in the patent claims
  - without undue experimentation
- What about AI generated inventions with no substantive human contribution (other than the algorithm and the training data)? Can a machine be an “inventor” under the applicable patent regime?

Stage 3: Innovation

- What: Commercialization – Scalable reproduction and widespread use
- Where: In local, regional, global or intergalactic markets

Ideation vs. Innovation: Historical Examples

- Helicopter
  - Conception: Leonardo da Vinci - 1480 (“Aerial Screw”)
  - Realization: Igor Sikorski – 1923



Ideation vs. Innovation: Historical Examples

- Submarine
  - Conception: William Bourne - 1578 (not Jules Verne)
  - Realization: Cornelius Drebbel – 1620

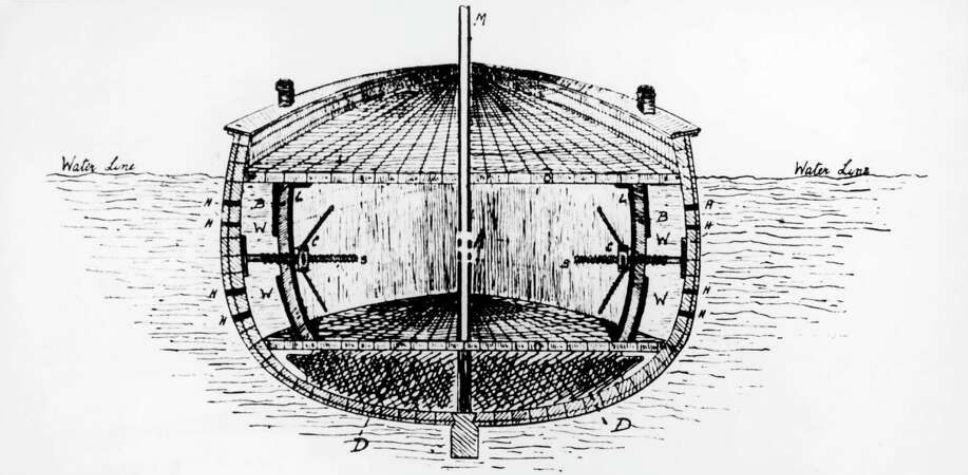
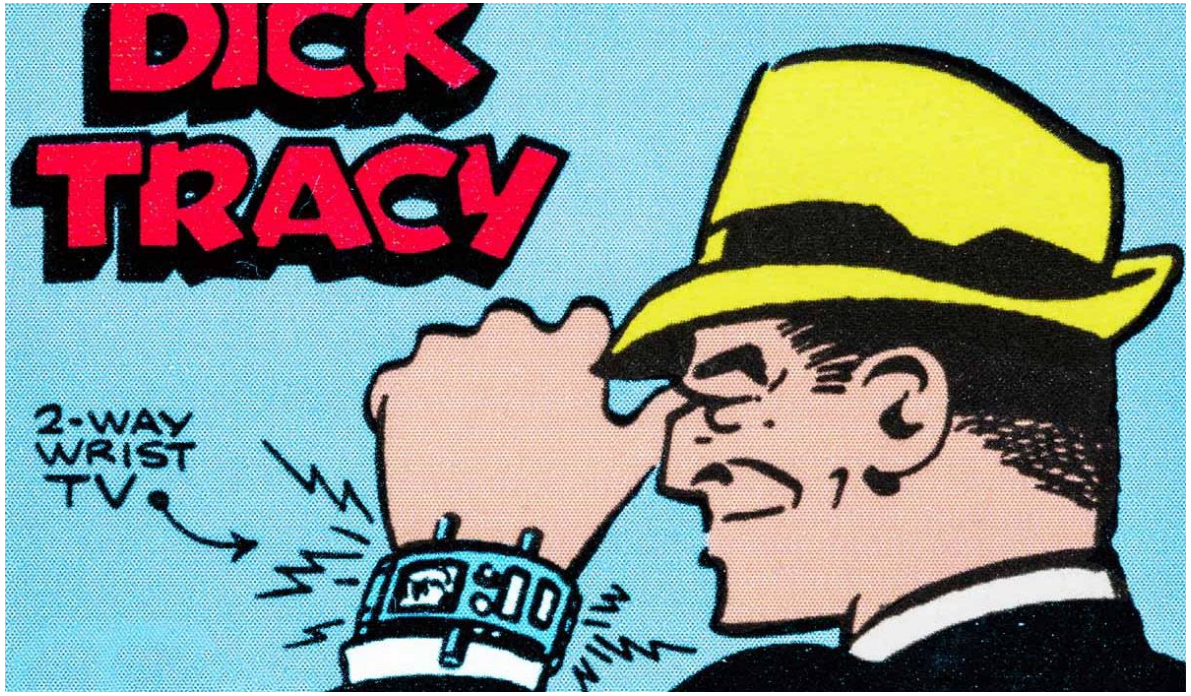


FIG. 3A.—*BOURNE'S SUBMARINE BOAT*, 1578.

A.—Air Holes.
B.—Bulkhead which is screwed in and out.
C.—Capstan for screwing Bulkhead in and out.
D.—Ballast.
H.—Inlet Holes for Water.
L.—Leather.
O.—Orlop.
M.—Hollow Mast for Air Supply.
W.—Space occupied by Water when Craft is submerged
S.—Screws.

Ideation vs. Innovation: TV/Radio Wristwatch

- TV/Radio Wristwatch
  - Conception: Dick Tracy Comic Book Character - 1948
  - Realization: Apple – 2005



Ideation vs. Innovation: Tricorder

- Tricorder - Non-Contact Portable Health Scanner
  - Conception: Star Trek (Gene Roddenberry/Wah Ming Chang) - 1966
  - Realization: Level 42 AI – 2020

Patenting and Time Travel

The Problem of First Contact

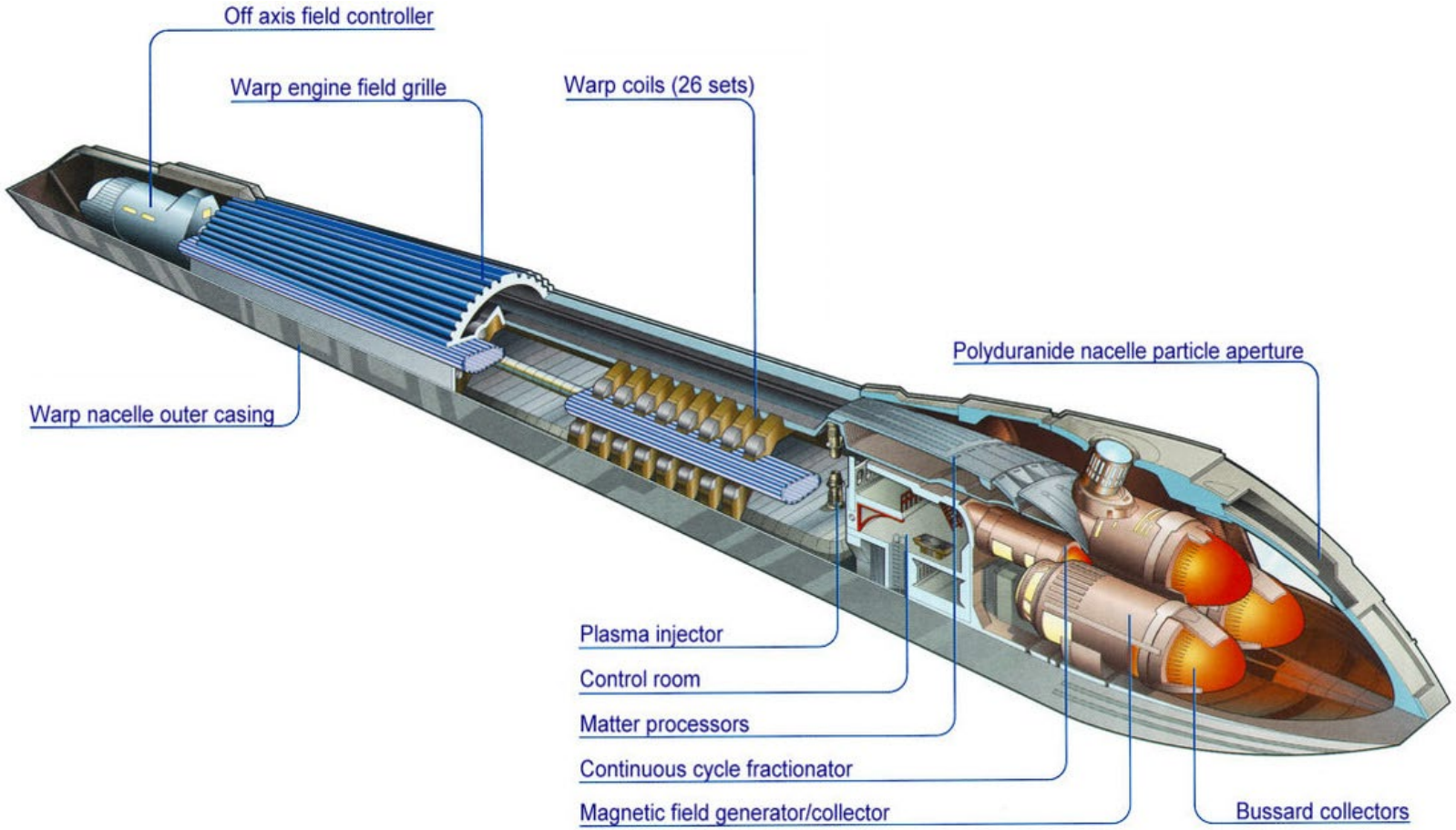
The Concept: Zefram Cochrane's *Phoenix*

Author: u/Lianeras at Reddit
reddit.com/r/NoMansSkyTheGame/comments/tddvcz/the_phoenix_from_star_trek_first_contact_zefram/

The *Phoenix* in *Star Trek: First Contact*

Author: user Aspersions at English Wikipedia, licensed under CC BY-SA 3.0
en.wikipedia.org/wiki/Star_Trek:_First_Contact#/media/File:Tucson05_TitanICBM.jpg

The Warp Nacelle: A Cross-Section



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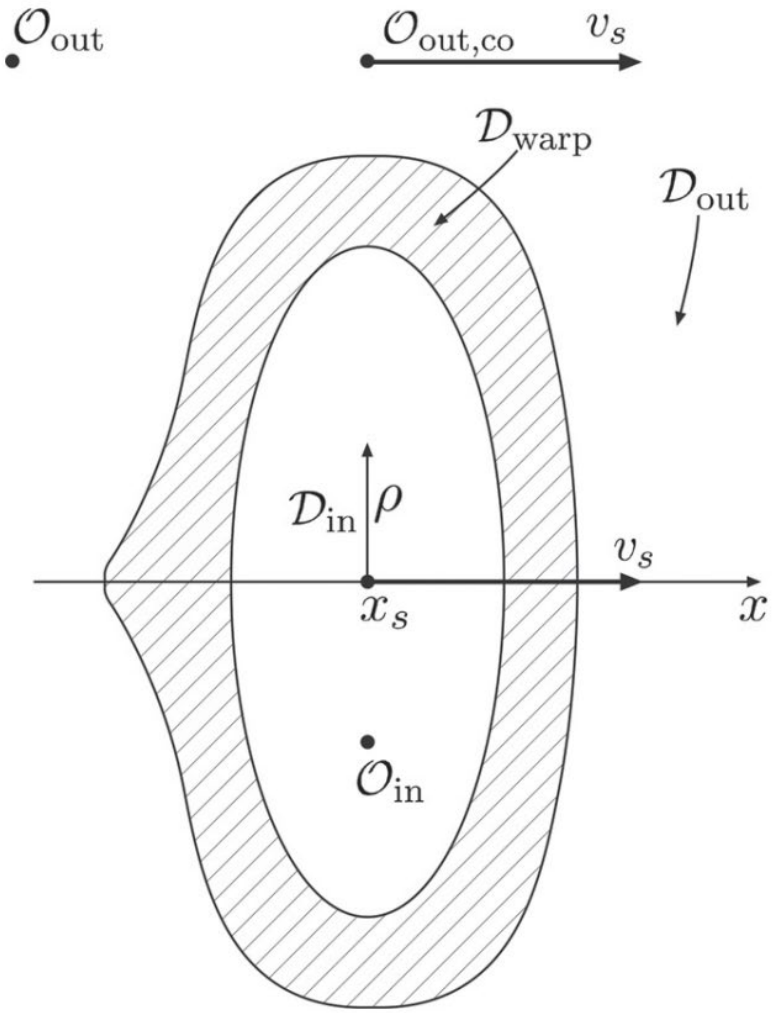
The Science: Warp-Drive Spacetime

A schematic illustration of warp-drive spacetime.

The spacetime consists of three regions:

- asymptotically-flat vacuum background D_{out} (background)
- general stationary curved region D_{warp} with a spherical topology (the warping region)
- flat inner region D_{in} ('passenger' space)

Axis x shows the direction of motion, while ρ is the cylindrical radius.



Alexey Bobrick & Gianni Martire
Introducing Physical Warp Drives
Class. Quantum Grav. 38 (2021) 105009

Questions?