



Intellectual Property: Pareto's Enabler of Space

- Why this Presentation?
- Myth #1: Software Patents
- Myth #2: Government Contracts
- What We Didn't Talk About Today
- Take-Aways

Why This Presentation?

Experience is the best teacher, but the tuition is high.

– *Norwegian Proverb*

Intellectual Property (IP)

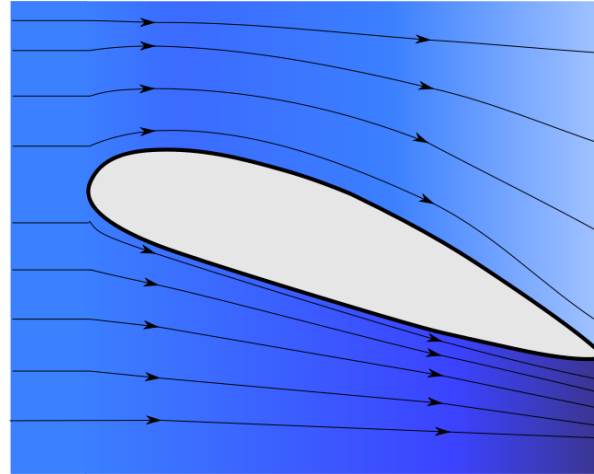
- Patents
- Copyrights
- Trade Secrets
- Trademarks

Why you should care:
The parachute analogy

Why This Presentation?

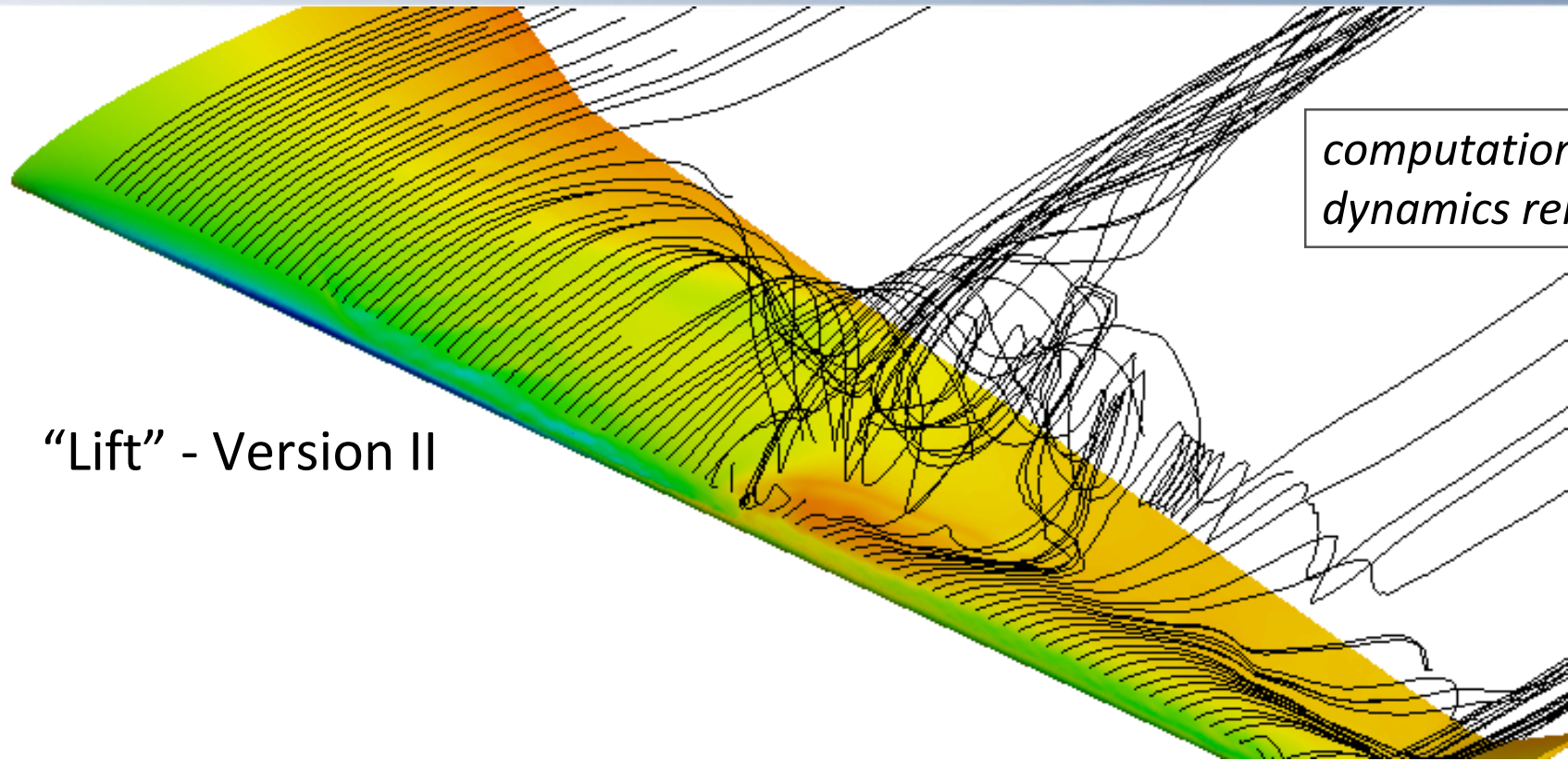
Depth-of-Discussion Metaphor

“Lift” - Version I



Movement of a wing through the air generates a pressure differential that “lifts” the wing.

Why This Presentation?



“Lift” - Version II


(this presentation: Version I)

Myth #1: There's No Sense In Getting a Software Patent

- Background Behind the Myth
- Current “Work-Arounds” & Shortfalls
- Why This Myth Is Harmful

Myth #1: There's No Sense In Getting a Software Patent

A Typical Published Patent


US009908640B2

(12) **United States Patent**
Gerwe et al.

(10) **Patent No.:** **US 9,908,640 B2**
(45) **Date of Patent:** **Mar. 6, 2018**

(54) **INCLINED SUPER-GEO ORBIT FOR IMPROVED SPACE-SURVEILLANCE**

(71) Applicant: **THE BOEING COMPANY**, Chicago, IL (US)

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(73) Assignee: **The Boeing Company**, Chicago, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 337 days.

(21) Appl. No.: **14/841,572**

(22) Filed: **Aug. 31, 2015**

(65) **Prior Publication Data**
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(51) **Int. Cl.**
B64D 47/08 (2006.01)
G06K 9/62 (2006.01)
B64G 1/10 (2006.01)
B64G 1/24 (2006.01)
G06K 9/46 (2006.01)
G06K 9/52 (2006.01)
G06T 7/60 (2017.01)

(52) **U.S. Cl.**
CPC *B64D 47/08* (2013.01); *B64G 1/1021* (2013.01); *B64G 1/242* (2013.01); *G06K 9/4661* (2013.01); *G06K 9/52* (2013.01); *G06K 9/6201* (2013.01); *G06T 7/60* (2013.01); *B64G 2001/1028* (2013.01); *B64G 2001/1035* (2013.01)

(58) **Field of Classification Search**
CPC . *B64D 47/08*; *G06T 7/60*; *G06K 9/52*; *G06K 9/6201*; *G06K 9/4661*; *B64G 1/242*; *B64G 1/1021*; *B64G 2001/1028*; *B64G 2001/1035*
See application file for complete search history.

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(57) **ABSTRACT**
Systems, methods, and apparatus for space surveillance are disclosed herein. In one or more embodiments, the disclosed method involves scanning, by at least one sensor on at least one satellite in inclined super-geostationary earth orbit (super-GEO), a raster scan over a field of regard (FOR). In one or more embodiments, the scanning is at a variable rate, which is dependent upon a target dwell time for detecting a target of interest. In at least one embodiment, the target dwell time is a function of a range from at least one sensor to the target of interest and a function of a solar phase angle. In some embodiments, the axis of inclination of the inclined super-GEO is a function of the solar phase angle.

19 Claims, 18 Drawing Sheets

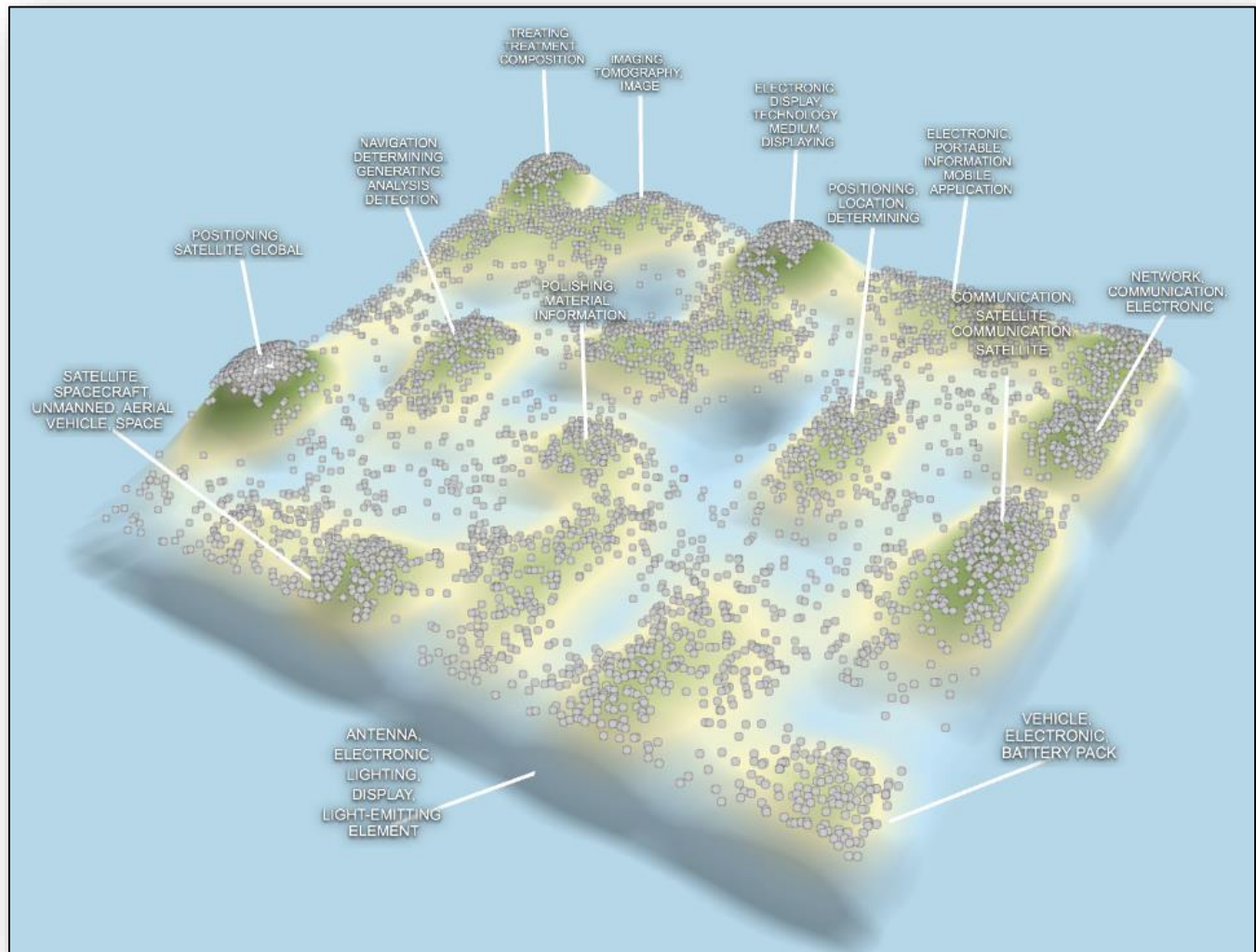
Myth #1: There's No Sense In Getting a Software Patent

What information can you get from a patent?

- Inventors & owners
- Scope of invention
- Description and use of cutting-edge technology
- State of the art
- Technology fields
- Macro and micro technology trends

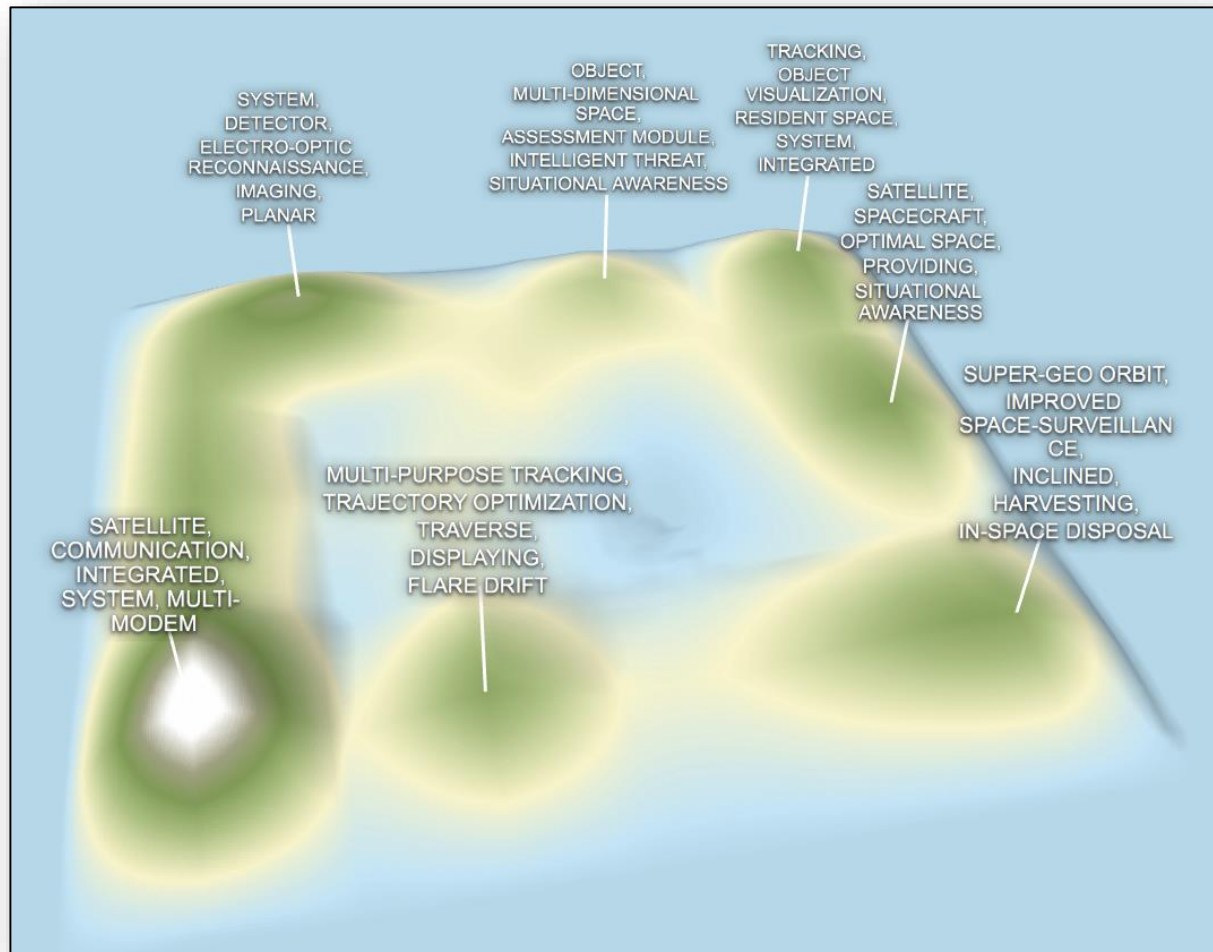
Myth #1: There's No Sense In Getting a Software Patent

The Space Landscape of Software Patents



Myth #1: There's No Sense In Getting a Software Patent

SSA-Related Software Patents



Myth #1: There's No Sense In Getting a Software Patent

Software and IP Protection

- Software: Copyrights OR Patents?
- An Evolving Appreciation for Software Patents
- A Good Rule of Thumb: File or Publish

Myth #2: The Government Owns My IP

- Who *really* owns the IP?
- What are the basic rules?
- Whose turf am I on?

What We *Didn't* Talk About Today

- The limits of software patents
- The shelf-life of software patents
- Government licensing models
- The evolving landscape of contractor IP rights

- Don't buy into popular myths – *especially* IP myths.
- Software inventions *can* be patented.
- The Government doesn't own it: *You* do.

Q & A