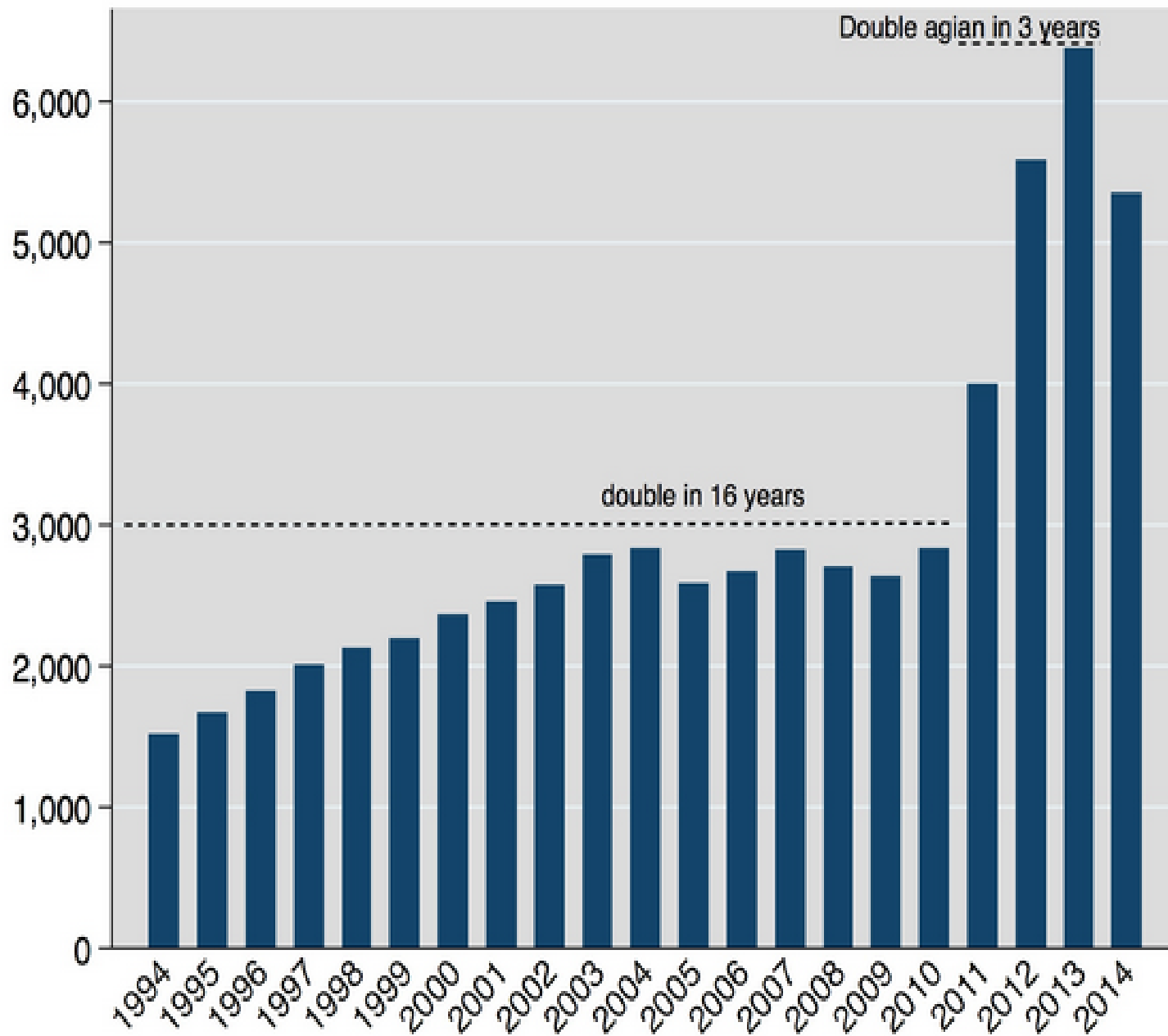


Guess What

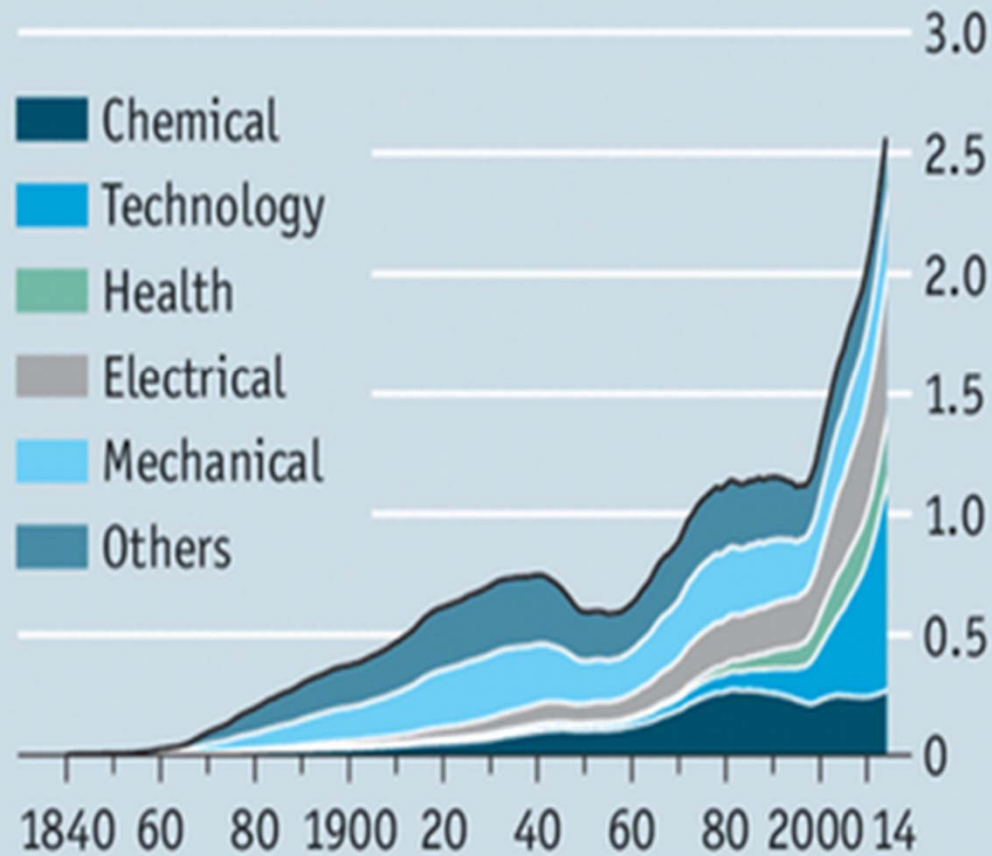


U. S. Patents by industry

Shooting up

2

US patents in force by industry classification, m



Source: "The USPTO Historical Patent Data Files",
by Alan Marco *et al*, SSRN working paper, 2015

What is Intellectual Property ?

- Creations of the mind
 - Inventions
 - Literary and artistic works
 - Symbols, names, and images used in commerce
- 5 categories
 - **Patents for inventions**
 - Trademarks
 - Industrial Designs
 - Geographical Indications
 - Copyright
 - Literary works: novels, poems, and plays
 - Films or Music
 - Artistic Works: Drawings, paintings, photographs, and sculptures
 - Architectural Designs

Intellectual Property Right

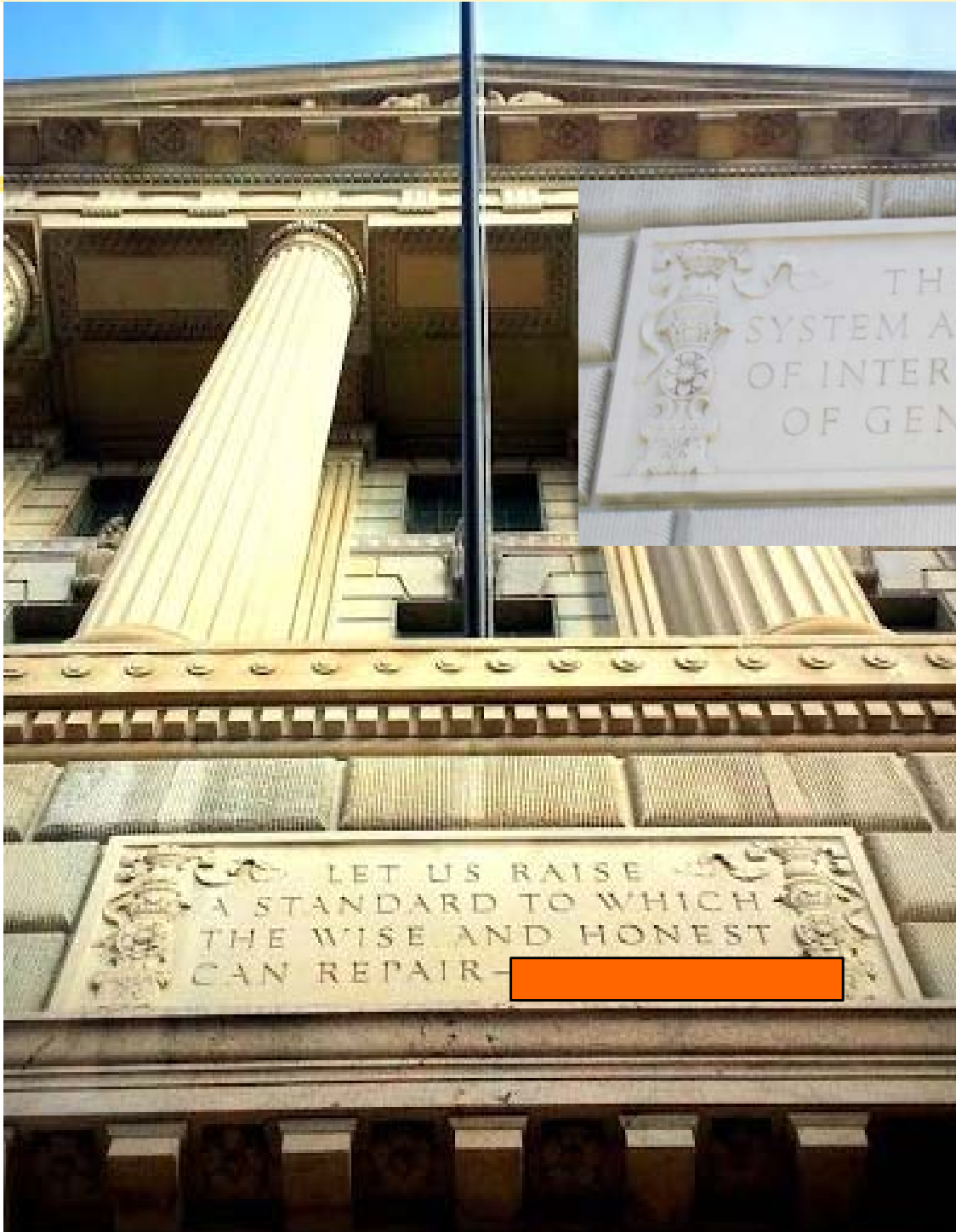
- Intellectual Property Right:
 - Allows creators, or owners, of (1) patents, (2) trademarks, or (3) copyrighted works to benefit from their own works or investment in creation
- **Historical Perspective**
 - (_____) Convention for the **Protection of Industrial Property** (1883)
 - (_____) Convention for the **Protection of Literary and Artistic Works** (1888)
 - Universal Declaration of (_____) Article 27 (1948):
 - Right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions.
 - U.S. Copyright Act of 1976 (U.S. adoption of Berne Convention on 3/1/1989)



Patents & U. S. Presidents



Relief representing the United States Patent Office at the Herbert C. Hoover Building



Why promote and protect intellectual property?

- First,
 - For progress and well-being of humanity
 - Continue to create and invent new works in the areas of technology and culture.
- Second,
 - encourages the commitment of additional resources for further innovation.
- Third,
 - spurs economic growth,
 - creates new jobs and industries, and
 - enhances the quality and enjoyment of life.



Patent and Protection

□ A patent

- an **exclusive right** granted for an invention – for a **limited period**, generally **20** years.
- “**Invention**” - **product** or **process** that provides a **new** way of doing something, or that offers a **new** technical solution to a problem.
- What kind of protection?
 - Patent cannot be **commercially made, used, distributed or sold** without the patent owner’s consent.
 - Patent rights, **enforced in courts** that hold the authority to stop patent **infringement**.

□ Patent Types

- () Patents – new and useful product/process
- () Patents – new design for an article of manufacture
- () Patents – production of any distinct and new variety of plant

Patent's Role

□ What Role do Patents Paly in everyday life?

□ Patented inventions in every aspect of human life

□ electric lighting (patents held by (_____) and Swan)

□ sewing machines (patents held by Howe and (____))

□ magnetic resonance imaging (MRI) (patents held by Damadian)

□ iPhone (patents held by (____)).

(12) United States Patent Jobs et al.

(54) TOUCH SCREEN DEVICE, METHOD, AND GRAPHICAL USER INTERFACE FOR DETERMINING COMMANDS BY APPLYING HEURISTICS

(75) Inventors: Steven P. Jobs, Palo Alto, CA (US); Scott Forstall, Mountain View, CA (US); Greg Christie, San Jose, CA (US); Stephen O. Lemay, San Francisco, CA (US); Scott Herz, San Jose, CA (US); Marcel van Os, San Francisco, CA (US); Bas Ording, San Francisco, CA (US); Gregory Novick, Santa Clara, CA (US); Wayne C. Westerman, San Francisco, CA (US); Imran Chaudhri, San Francisco, CA (US); Patrick Lee Coffman, Menlo Park, CA (US); Kenneth Kocienda, Sunnyvale, CA (US); Nitin K. Ganatra, San Jose, CA (US); Freddy Allen Anzures, San Francisco, CA (US); Jeremy A. Wyld, San Jose, CA (US); Jeffrey Bush, San Jose, CA (US); Michael Matas, San Francisco, CA (US); Paul D. Marcos, Los Altos, CA (US); Charles J. Pisula, San Jose, CA (US); Virgil Scott King, Mountain View, CA (US); Chris Blumenberg, San Francisco, CA (US); Francisco Ryan Tolmasky, Cupertino, CA (US); Richard Williamson, Los Gatos, CA (US); Andre M. J. Boule, Sunnyvale, CA (US); Henri C. Lamiroux, San Carlos, CA (US)

(73) Assignee: Apple Inc., Cupertino, CA (US)

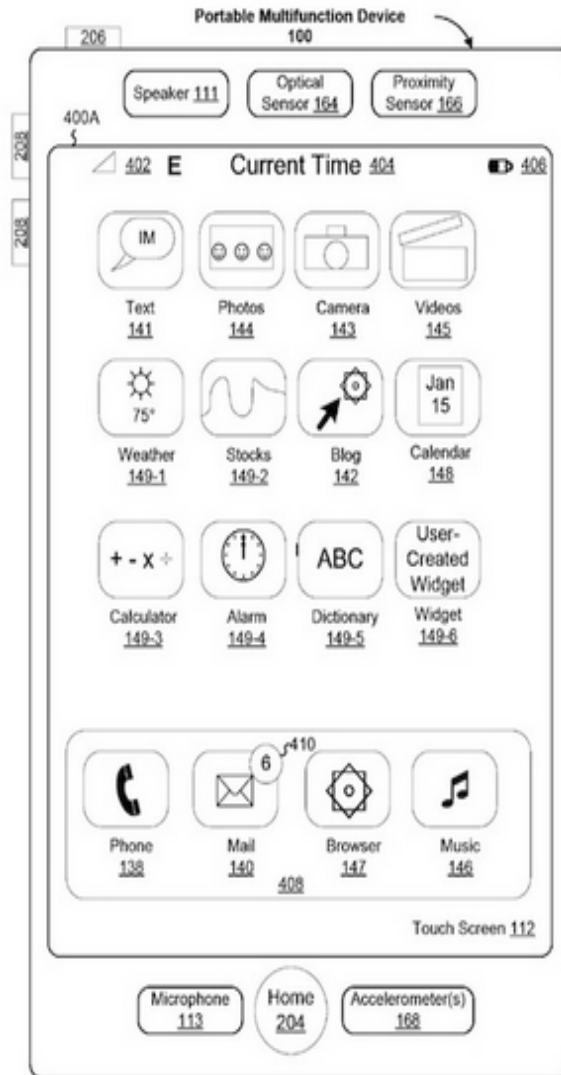


Figure 4A

Patent Application

- How is a patent granted?
 - **1** File a patent application.
 - Content of the application
 - Title of the invention, as well as an indication of its Technical Field.
 - Background and a description of the invention, in clear language and enough detail that “an individual with an average understanding of the field could use or reproduce the invention.”
 - Visual materials –drawings, plans or diagrams – that describe the invention in greater detail.
 - “claims”, that is, information to help determine the extent of protection to be granted by the patent.
 - **2** Examination by Patent Examiners

□ Functions of the USPTO

- **grants patents** for the protection of inventions and to **register** trademarks.
- **examines applications**
- **publishes** patent information, records assignments of patents,
- **maintains** search files of U.S. and foreign patents,
- **maintains** a search room for public use in examining issued patents and records.



□ What can/cannot be Patented

□ 1. Useful.

- subject matter has a useful purpose and
- includes operative-ness. (a machine which will not operate to perform the intended purpose would not be called useful, and therefore would not be granted a patent)
- The laws of nature, physical phenomena, and abstract ideas are **not patentable** subject matter.
- A patent **cannot be obtained upon a mere idea or suggestion.** A complete **description of the actual machine** or other subject matter is required.
- 2. Novelty and
- 3. Non-Obviousness

□ **Novelty** and **Non-Obviousness**, Conditions for Obtaining a Patent

□ Must be **new** as defined in the patent law, which provides that an invention **cannot be patented if:**

□ “(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or **otherwise available to the public before the effective filing date of the claimed invention**” or

□ “(2) the claimed invention was described in a patent issued [by the U.S.] or in an application for patent published or deemed published [by the U.S.],
.....”

□ Term “**otherwise available to the public**” **refers** to other types of **disclosures of the claimed invention** such as, for example,

□ an oral presentation at a scientific meeting,

□ a demonstration at a trade show,

□ a lecture or speech,

□ a statement made on a radio talk show,

□ a YouTube™ video, or

□ a website or other on-line material.

Contemporary Issues which involve Intellectual Property Rights

- **Class Activity** – Team work – Search and make 1-sentence summary on each of the patent disputes

- Patent dispute between Apple and Samsung (**on smartphone patents**)



- Copyright Lawsuit between Oracle and Google (**on Java APIs**)



- Qualcomm suing Apple (**Smartphone Modem Chips**)

