IC Conference
Cal Poly State University
San Luis Obispo, California

Graphic Arts Patents, Trolls, and Searchable Databases

Presented by

Harvey R. Levenson, Ph. D.
Professor Emeritus
Graphic Communication Department
California Polytechnic State University
San Luis Obispo, California

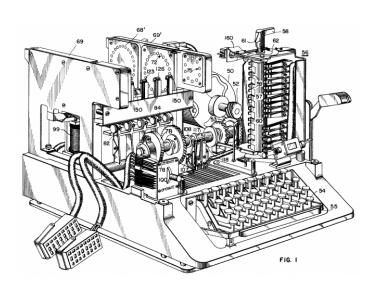




Graphic Communication Patents— The International Picture

- 30-year study 1968 1997
- 22,552 patents
- 19,498 (86%) from US (12,800), Germany (3,580), Japan (3,118)
- Today's production changed
- Patent cases I've worked on (High visibility)





Today's Greatest Areas of Patent Activity

- Pharmaceuticals (Await patents to expire)
- Software (The invisible technology)

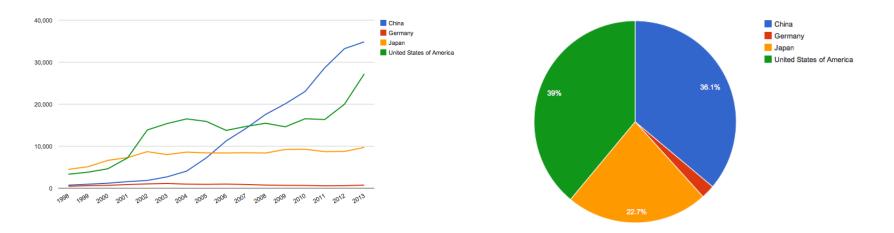






Today's Greatest Areas of Patent Activity in Digital Communication – 1998 - 2013

- United States and Japan continue
- China emerges



Source: World Intellectual Property Organization (WIPO)

Trolls – The Moral Dilemma

- Company survival at stake
- Jobs at stake





Background of Troll Issues in the Graphic Arts

- Companies that do not produce the product that the patents teach
- Trolls want licensing fees, royalties, or lump-sum payments
- Defendants often cannot afford to enter lawsuits and settle







Issues Related to Industry and OEMs

- Small to medium sized companies are most vulnerable
- OEMs are vulnerable to being sued by users for alleged violation of patents



Original Equipment Manufacturer

PIA PRESIDENT MICHAEL MAKIN ADDRESSES
CONGRESSIONAL SENATE JUDICIARY COMMITTEE

https://www.youtube.com/watch?v=2nh2DHaWdV0

Industry Segments

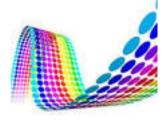
- Hardware and Software Producers
- Content Creators
- Service Providers



Patent Issues Related to Service Providers

- Commercial printers small, medium, large
- In-plant printers
- Specialty printers







Prior Art

- What is Prior Art?
- What is the value of the Prior Art Search?
- Where can Prior Art be found?
- How to identify Prior Art to invalidate existing patents

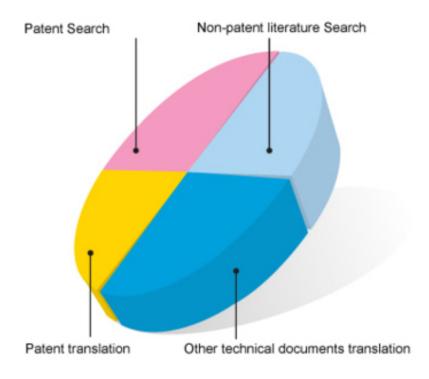




Categories of Prior Art

- Patents
- Industry publications
- Conference proceedings
- Advertising





What Juries Understand and Identify With

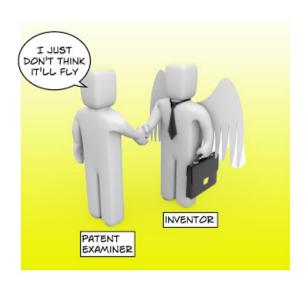
- Encyclopedias (e.g., Britannica)
- Well-known publishers (e.g., McGraw Hill)
- Other popular media

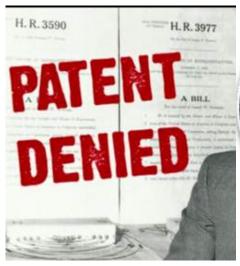




Patent Examiner Limitations and Constraints

- Not always knowledgeable in the technology being examined
- Time constraints on completing examinations
- Not always aware of where to find Prior Art on esoteric technologies







Cal Poly

Who we are and what we do

- Learn by Doing
- Laboratory focus
- Faculty and staff
- Advisory Board
- Services for industry
- A Searchable Data Base











Undergraduate Education (BS in Graphic Communication)

- Design Reproduction Technology
- Web and Digital Media
- Packaging Graphics
- Graphic Communication Management
- Individualized Study





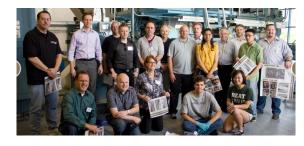
Graduate Education

- MBA with focus on Document Systems Management
- MS in Printed Electronics and Functional Imaging



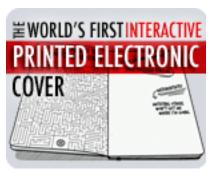
Services for Industry – Graphic Communication Institute at Cal Poly (GrCI)

- Research
- Testing
- Product Evaluations
- Training
- Seminars
- Workshops
- Conferences
- Publishing
- Literature Searches













Raymond J. Prince Graphic Arts Collection Also featured are special collections including:

- Art Diamond Toners, Inkjet, and Photoreceptor Publications
- E. H. Wadewitz Memorial Library Collection
- Graphic Communication Rare Books
- Raymond J. Prince Resource Room Publications
- Richard Fisch Science and Technology Publications
- Recharger Publication Michlin Collection
- Cal Poly Shakespeare Press Museum Collection



Cal Poly Offers Graphic Communication Literature Search Services

Raymond J. Prince Graphic Arts Collection, the largest graphic arts library collection in the world

Several examples of how this literature resource can be used

- 1. A company offering a new product wants to be sure that it is not violating an existing patent.
- 2. A company is sued for using a technology that allegedly violates an existing patent and wants to search for Prior Art that disqualifies the patent in question.
- 3. A student doing research but does not have access to the pertinent literature in the field.
- 4. A professor or industry consultant writing a book or article wanting additional information and bibliographic citations for the material being referenced.



The Graphic Communication Institute at Cal Poly Offers Cartridge Testing for OEMs and Remanufacturers

The GrCl conducts inkjet, toner, and paper testing for OEMs and remanufacturers globally.







We have established "benchmark" standards after having tested over 50 products

Some testing for inkjet ink include:

- Optical density
- Dot roundness
- Color gamut
- Line raggedness
- Inter-color bleed
- Mottle
- Drying time
- Banding



Testing for powdered toner include:

- Optical density
- Dot roundness
- Line raggedness
- Mottle
- Ghosting
- Background noise
- Adhesion
- Paper curl



For information on scheduling testing and costs, contact:

Lyndee Sing, Director
Graphic Communication Institute at Cal Poly
+1-805-756-2645
Ising@calpoly.edu
www.grci.calpoly.edu



Publications and Resources for Industry

In sum, Cal Poly offers:

- Meeting facilities
- Research and testing services
- Prior Art and literature searches







We are here to help!

Harvey R. Levenson, Ph. D.
Professor Emeritus, Graphic Communication
Cal Poly State University
San Luis Obispo, California

hlevenso@calpoly.edu 1-805-801-6025

QUESTIONS?

