



INTELLECTUAL PROPERTY: *Defending Your Publication*

Presented by
Harvey R. Levenson, Ph. D.
Professor Emeritus
California Polytechnic State University
San Luis Obispo, California

AM&P **360** **ASSOCIATION
MEDIA
& PUBLISHING**

#AMPAnnual18

FINISHED FILES ARE THE RESULT OF YEARS OF SCIENTIFIC STUDY COMBINED WITH THE EXPERIENCE OF MANY YEARS.

FINISHED **F**ILES ARE THE RE-
SULT **O**F YEARS **O**F SCIENTIF-
IC STUDY COMBINED WITH THE
EXPERIENCE **O**F MANY YEARS.

The importance of getting it right the first time!

Changing World of Graphic Communication – *Printing and Publishing*

- Traditional Print
- Digital Imaging
- Combining Traditional Print and Digital Imaging into E-Publications



Growing Markets Are Impacting Intellectual Property Protection

- Custom printing
- Variable data printing
- Just in time printing and publishing
- E-publishing
- Mass-customization of media
- On-demand printing
- One-to-one communications
- The market of one
- Targeted marketing



**INTERACTIVE
INTELLIGENCE**
DELIBERATE INNOVATION



Imaging Technology Simplifies Copying and Infringement

- Cloud Computing
- Digital printing and imaging
- Short-run color
- High-speed wide format
- Printed electronics
- 3D printing – Atoms, not digits
- E-ink, E-paper
- Micro Cameras



Mobile Devices Speeds the Ability to Copy and Infringe

- QR Codes
- Clickable Paper
- RFID
- Apps Development
- Near-field Communication



We're Facing a Changing Communication World: *To Print or Not to Print? That is the Question!*

“Newsweek gives up print and then comes back.”

“Newsweek's Move Back to Print Signals Huge Opportunity for Brands”

“Los Angeles entrepreneur invests in printed newspapers.”

“US Government Printing Office provides buy-outs as it moves from print to electronic.”

“[Orange County] Register owner to launch L.A. newspaper Wednesday”

“As newspapers struggle, Los Angeles gets another daily.”

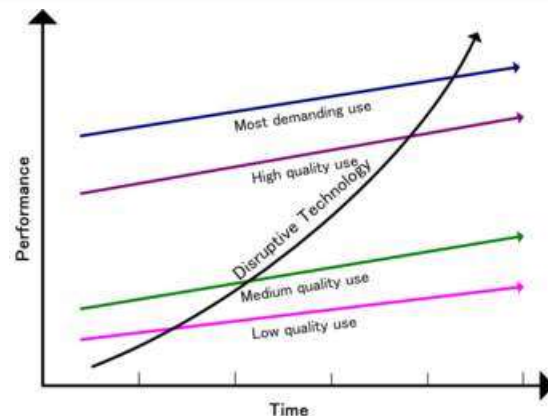
“Print: It's alive! – *Newsweek's* return to print is another body blow to the idea of free content from old media.”

“In this age of e-books, printed page still alive.”

“TIME — with an uncertain future.”

Devices for Digital Media – Disruptive Technology for Protecting Intellectual Property

- Digital Presses
- Internet and WWW
- Software (The hidden/invisible technology)



Confusion Abounds About Copying and Sending when Printing and Electronic Media Become the Same

Examples of what lies ahead:

- E-Ink and E-Paper
- Ricoh Clickable Paper



Paper

Are we moving to a paperless society?

**The number one reason we will never live
in a truly paperless society!**



Myth and Reality

Myth!

We are moving toward a paperless society.

Reality!

*We are moving toward longer lasting
and more durable paper.*

Paper consumption continues in spite of the growth of electronic media and the use of computers

Three areas of consumption

- Traditional paper
- Synthetic paper
- Electronic paper

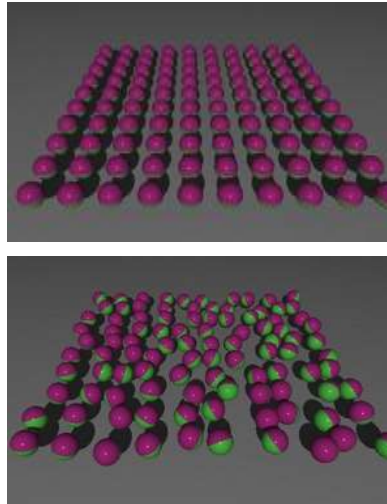
MIT and Xerox PARC Electronic Paper (E-paper/E-ink)

*A developing technology with implications on
copyright protection*

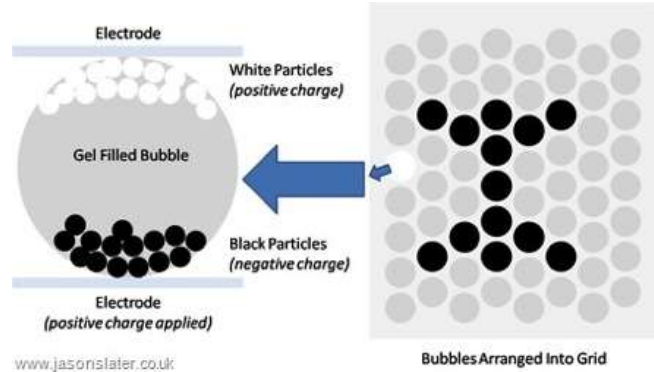
MIT and Xerox PARC

- Bi-colored microcapsules.
- Based on spherical geometry.
- Sphere full of liquid coloring influenced by an electric field.
- Electric field generates two different states:
 - Colored
 - Not colored
- Substrate contains a fine matrix of electrodes.
- Image will remain after the device is turned off.
- Paper acts like a monitor

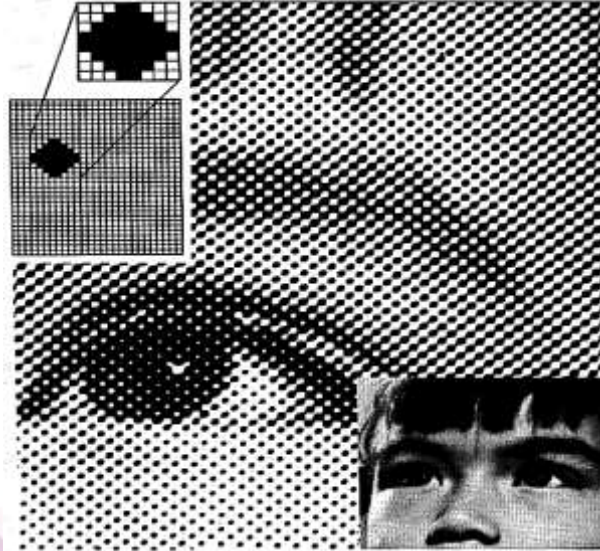
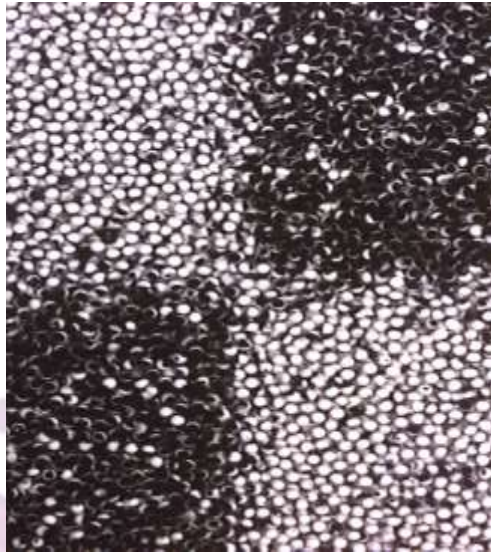
Electric Fields



Gyricon from Xerox



E-Ink from MIT





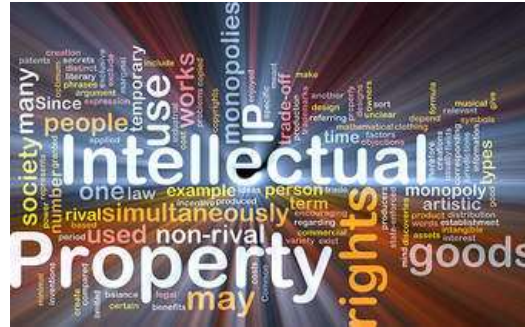
Growth of Digital Media Has Encouraged Illegal Copying

- Books
- Magazines
- Newsletters
- Journals



Intellectual Property for Printing and Publishing

- Patents
- Copyrights
- Trademarks
- Trade Secrets



Patent Tolls/Copyright Infringers

- Growing Concerns
- The Issues



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



Protecting Copyrights for Print and E-Publications

The public needs to better understand:

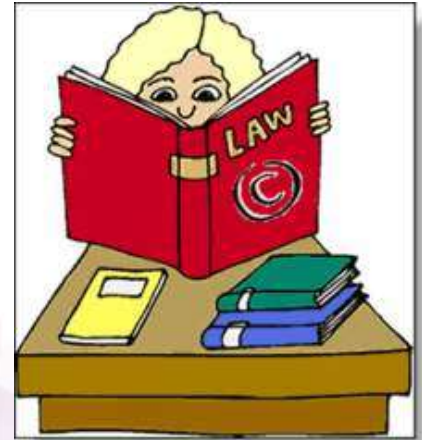
- Copyright Law – United States Code
- Fair Use Standard



Maximum copyright protection involves a copyright notice and registration of the copyright with the United States Copyright Office.

Copyright Law of the US and Related Laws in Title 17 of the United States Code – December 2016.

- Original documents are automatically copyrighted regardless of visible notification.
- Strength is enhanced by a physical placement of copyright notice and symbol on an original document.
- Registration of copyrights with the US Copyright Office is required in matters of dispute involving lawsuits.



Typically, a copyright notice contains four different elements:

- *The Copyright Symbol*
- *The Year of the Creation*
- *The Name of the Author*
- *A Rights Statement*

The degree to which the copyright notice is detailed varies greatly from publication to publication, depending on the author or publisher preferences.

Range of Copyright Notices

- Copyright notice and date (COPYRIGHT © and the year).
- Restrictions about reproducing the publication fully or partially.
- Material may not be reproduced or transmitted in any form, mechanically or electronically.
- Any copying first requires author or publisher permissions.
- Guidelines as to what is or is not permissible, such as only the copying of brief quotes.
- Specific restrictions about copying internally within an organization or externally because some documents are restricted to only one recipient.
- Contracts with a subscriber limiting circulation to a specific number of people.
- Prohibit distribution via local- and wide-area networks and intranets.
- Prohibit sharing passwords that are given to authorized recipients.

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Fair Use Standard

- Criticism and comment
- News reporting
- Research and scholarship
- Nonprofit educational uses
- Parody

**Copyright
Fair Use?**



What About Alleged Infringements of Images – Art, Photos, Etc.?

Legal Standard – To establish infringement, two elements must be proven:

- Ownership of a valid copyright.
- Copying of elements of the work that are original.



Work is Derivative Work?

- If it includes works earlier published or registered for copyright.
- Work fallen into the public domain.
- Work based on one or more preexisting works.
- Must be identified when applying for a copyright.



Originality is essential and indispensable for copyright

- The key word is **“Trivial”**
- Work must have sufficient originality in its variation that it is **more than merely trivial**.



Digital Rights Management (DRM) – *No guarantee of copyright protection*

- Issues (Extensive in the literature)
- Applications (Software and suppliers)
- The Digital Millennium Copyright Act (DMCA)



DRM Sources and Applications

Nowhere in the code is any reference to DRM requirements to protect a copyright or the requirement of any DRM application including but not limited to the following:

DRM Sources and Applications

Adobe Digital Editions Protection Technology
(ADEPT)

Amazon Digital Rights Management (DRM) devices

Apple FairPlay

Aries Systems

ArtistScope

Authentic

CAPTCHA - Distorted alphanumeric images

Digital watermarking

- Attributor Guardian

- Digimarc Guardian

- MarkMonitor

- Muso

Drumlin Security

FileOpen

Fingerprint readers

HTML format prevention

LockLizard

PDF prevention

Push button Security Tokens

SealedMedia

Two-factor authentication

User names and passwords and codes

Vitriol Systems

Quotes About DRM

FROM: Britannica

“While DRM applications “may” be helpful, the applications are not able to detect all infringements...there is deception occurring that adds to the skepticism surrounding DRM. “The deceptive practice of installing programs without explicitly notifying users...”

FROM: DigitalPublishing 101

“DRM makes ebooks more complex to use and to sell, making it unpopular with consumers and limiting publishers options to sell ebooks directly or through niche outlets.”

FROM: How Digital Rights Management Works

“There are no industry-wide standards for DRM... The area of most concern to activists regarding DRM has to do with the fact that current DRM trends surpass the protections afforded under traditional copyright law.” Examples are “fair use,” and “first sale.”

FROM: eBook Architects

“One main issue is that all of the DRM systems that are in place right now have been “cracked” (broken), so someone who is committed to the idea of pirating eBook content will be able to easily pull the DRM off your eBook file.”

FROM: Is DRM the Best Deal for the Public?

“DRM technologies, backed by laws like the DMCA, pose a serious potential threat to fair use.”

FROM: The Current Legal Environment

“Opposition to DRM, voiced mainly by legal scholars and public advocacy groups, has focused on its use by copyright holders to restrict access to content purchased by individuals.”

FROM: DRM and the Law

“The pool of adversaries capable of defeating the system goes up over time, and the energy they must expend to do so goes down over time...”

FROM: DRM Is The Right To Make Up Your Own Copyright Laws

“It's been clear that DRM isn't the right to prevent piracy: it's the right to make up your own copyright laws; the right to invent things that people aren't allowed to do – even though the law permits it...”

FROM: CONSUMER'S GUIDE TO DIGITAL RIGHTS MANAGEMENT – Is DRM good or bad?

“DRM also restricts the ways in which digital content can be used or the choice of buying content from different providers.”

Conclusions

**Using the Past to Predict the Future:
Things cannot be the same**

“The Steelworker Syndrome”

Meaningful Technology is Not a Short-lived Passing Fad – It Is Pervasive

**Pervasive technology lives on.
It permeates nearly every facet of human life.**

- If it solves human problems, it lasts!
- If it improves life, it lasts!
- If it improves communications, it lasts!

...until a better technology comes along to replace it.

What of the future?

Convergence of Technology and the Human Experience

At Cal Poly we call it “Expressive Technologies”



"The printer is the friend of intelligence, of thought; [the printer] is the friend of liberty, of freedom, of law; indeed the printer is the friend of every [person] who is the friend of order ... Of all the inventions, of all the great results in the wonderful progress of mechanical energy and skill, the printer is the only product of civilization necessary to the existence of free [people]."

Charles Dickens

THANK YOU!

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

*hrlevenson@thegrid.net
1-805-801-6025*

