

Bits are not Atoms

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4 Semi-Apocryphal Stories

- The story of Pi
- On bumblebees and physicists
- Red flag laws
- Adoration of the Mainframe

Atom Things

- Are visible
- Can be held
- Can be moved
- Come in identifiable unique packages
- Can be bar-coded, RFID'd, price-tagged, labeled, glued down, painted, scratched,...

Bit Things

- Are invisible, intangible, conceptual
- Are not self-defining
- Can be transmitted electronically
- Can be copied with 100% fidelity
- Cannot be “moved” at all
- Cannot be tagged, bar-coded, etc. without turning them into other bit things

DRM Means
Trying to Make
Bit Things
Work Like
Atom Things

And so we are...

- Developing wonderfully clever ways to package, encrypt, watermark bit things
- Mandating that technology refuse to process “raw” bit things, but only packaged, encrypted, watermarked bit things
- Developing wonderfully clever ways to identify and authenticate owner things (ie, people)
- Mandate that technology refuse to let owner things touch bit things except as authorized

But in the end

But in the end

Bumblebees will still fly

A Plug:
“Death by DMCA”
Fred von Lohmann and Wendy Seltzer
IEEE Spectrum Online
June, 2006
