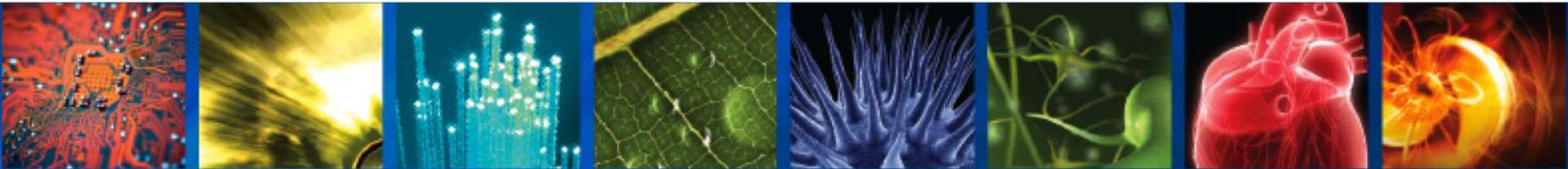


Patent Eligibility of Computer Implemented Inventions in the US

Vlad Teplitskiy
October 23, 2017



Introduction

Importance of Foreign Associates

- Important to have trusted partners in foreign countries who can provide assistance
 - Review specification and claims
 - Assist with best practices for local jurisdictions (e.g., patentable subject matter, deferral of costs, divisional strategy, assignments, etc.)

Value for Money

- **Close relations between US/foreign practices**
 - Reduce miscommunications
 - Matching of competence in IP and technology
 - Exchange of ideas
- **Reduce divisional filings**
- **Proactive prosecution**

Transparency

- Predictability of fees
- Direct contacts to the person managing a case
- Risk management
- Predictability of results

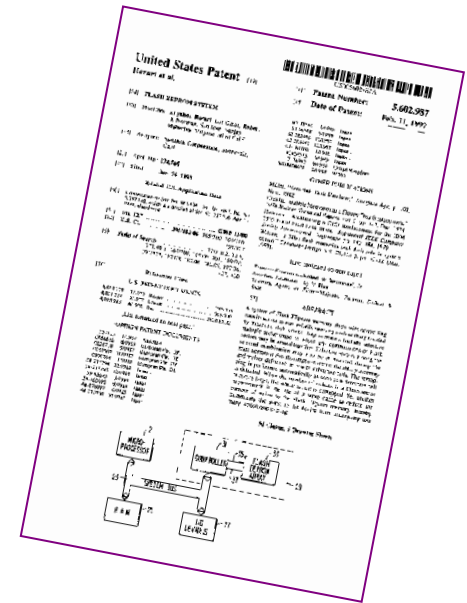
Bad News

- Appeal necessary
- Missed convention priorities
- Patent eligibility refusals
- Close partners split – forced choice

Patent Basics

What to Patent?

- Right to exclude others from making, using, selling, etc.
 - Does not give patent owner right to make, use or sell invention
- Commonly patented technologies
 - Devices, systems, components, materials
 - Methods of manufacturing or using
 - Computer-implemented methods (software)



Requirements for Patentability

- Invention as claimed must be
 - Novel (35 U.S.C. 102)
 - Non-obvious (have inventive step) (35 U.S.C. 103)
- With respect to the “prior art”
- Prior art includes earlier patents and printed publications
 - Can also include clinical trials and user evaluations if not done under NDA
 - Beware of pre-launch activities

Another Requirement: Patent Eligibility

- Is the invention even eligible for patenting?
- Also known as:
 - Statutory subject matter
 - Satisfies 35 U.S.C. 101 (or section 101)

Patent Eligibility

Eligible Subject Matter

§ 101 provides:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor....

Exceptions to Eligible Subject Matter

- Judge-made exceptions to patent-eligible subject matter
 - Products of Nature
 - Natural Laws / Natural Phenomena
 - **Abstract Ideas / Mental Processes (Alice)**

These exceptions are “part of the storehouse of knowledge ... free to all men and reserved exclusively to none.”

Funk Brothers Seed Co. v. Kalo Inoculant Co., 333 U.S. 127 (1948)

Why Focus on Patent-Eligibility?

- “What the Courts Did to Curb Patent Trolling-for Now”
The Atlantic (December 2014)
- “Alice Corp. Patent Ruling Is Good For Software Firms, Bad News For Trolls”
Forbes (June 2014)
- “US Supremes Uphold Troll-Busting Alice v CLS Bank decision”
The Register (June 2014)

Greater Scrutiny for Certain Subject Matter

Rates for Section 101 rejections, relative to all office actions and notices of allowances issued in each “guidance” period

Percent of Office Actions with Section 101 Rejections

Tech Cent..	Art Unit Tech	Before Alice	Prelim Guidanc..	Interim Guidan..	July 2015 Upda..	Enfish May 2016	McRO Nov. 2016
2100	Computer Engineering	12%	16%	14%	11%	9%	11%
	Computer Science & Applications	25%	24%	24%	20%	18%	20%
2400	Communications & Networking	13%	13%	17%	22%	17%	16%
	Computer Science & Applications	17%	16%	20%	22%	16%	17%
	Cryptography	27%	26%	34%	36%	29%	31%
2600	Communications & Networking	9%	9%	11%	11%	11%	9%
	Computer Engineering	5%	5%	5%	4%	3%	4%
	Computer Science & Applications	22%	22%	22%	22%	21%	18%
	Signal Processing	16%	16%	19%	18%	17%	16%
2800	Computer Engineering						
	Electrical Components, Devices & Sys..	4%	7%	8%	7%	9%	9%
	Physics	2%	3%	3%	2%	3%	2%
	Semiconductors	2%	2%	1%	1%	0%	0%
3600	Civil Engineering	3%	4%	4%	4%	3%	3%
	Manufacturing	2%	2%	2%	2%	2%	2%
	Transportation	12%	16%	13%	14%	14%	14%
3600BM	Business Crypto	49%	67%	74%	81%	84%	82%
	Business Processing	39%	87%	96%	91%	93%	92%
	Cost/Price, Reservations	40%	72%	88%	88%	90%	91%
	E-Shopping	51%	92%	95%	91%	94%	89%
	Finance & Banking	41%	83%	96%	95%	96%	94%
	Health Care	42%	85%	93%	93%	95%	96%
	Incentive Programs	45%	87%	95%	92%	93%	93%
	Operations Research	50%	88%	97%	95%	95%	93%
	POS, Inventory, Accounting	28%	74%	78%	77%	79%	78%
3700	Amusement & Education	20%	40%	50%	43%	38%	36%
	Energy & Power	2%	4%	4%	3%	3%	2%
	Manufacturing	1%	2%	1%	1%	1%	0%
	Medicine	6%	9%	11%	10%	9%	9%
Grand Total		11%	15%	17%	16%	14%	15%

Source: *Bilski Blog*

Two-Part Test for Patent Eligibility

- **Threshold inquiry (Step 1)**
 - Is the claimed invention directed to an abstract idea?
 - If not, then the claimed invention is patent eligible
- **Inventive concept inquiry (Step 2)**
 - Do the claimed elements alone or in combination state significantly more than the abstract idea?
 - If yes, then the claimed invention is patent eligible

Examples of Abstract Ideas

- **Fundamental Economic Processes**
- **Idea “Of Itself”**
- **Mathematical Relationships/Formulas**
- **“Certain” Methods of Organizing Human Activity**

Patent Eligible Example: Specific Improvement in Computer Capabilities

Enfish, LLC v. Microsoft Corp. (Fed. Cir. 2016)

- Patent claims directed to specific type of data structure designed to improve the way a computer stores and retrieves data in memory

FIG. 10

DEFINITIONS FOR FOLDER RELATED COLUMNS

OBJECTID	#101 [TYPE]	#2 [LABEL]	#301 [PARENT FOLDER]	#320 [FOLDERCHILDREN]
#301	FIELD	PARENT FOLDER	NA	NA
#320	FIELD	FOLDERCHILDREN	NA	NA
#1100	COMPANY	DEXIS	#1070 [CONTACTS]	NA
138 #1101	PERSON	SCOTT WLASCHIN	#1070 [CONTACTS]	NA
244 #1070	FOLDER	CONTACTS	NA	1100 [DEXIS]; 1101 [SCOTT WLASCHIN]; 1102 [LOUISE WANNIER]; ETC.

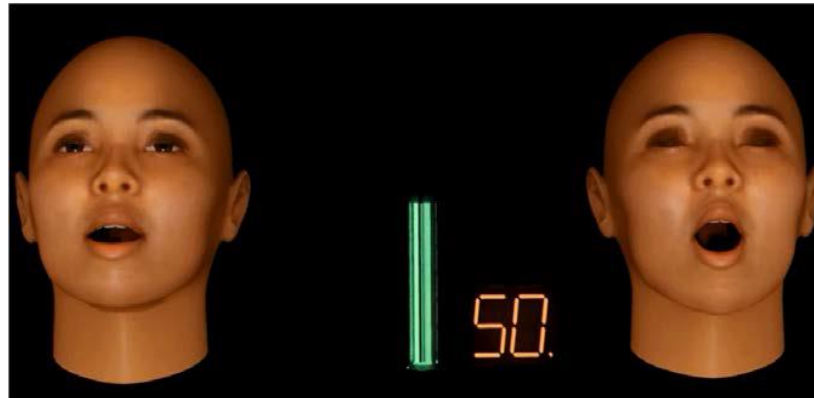
240 242

FOLDERCHILDREN
IN USE AS AN
ATTRIBUTE OF A
FOLDER OBJECT

Patent Eligible Example: Improving an Existing Technological Process

McRO v. Bandai Namco (Fed. Cir. 2016)

- Patent claims directed to the automatic lip synchronization and facial expression animation using computer-implemented rules



McRO: Improving an Existing Technological Process

- Claims a particular solution to a problem or a particular way to achieve a desired outcome (as opposed to merely claiming the idea of a solution or outcome)
 - Before the invention, human artists relied on subjective determinations to set the morph weights to match phonemes
 - Specification explained how the claimed rules enabled the automation of tasks that previously could not be automated

Patent Eligible Example: Unique Arrangement of Known Elements

BASCOM v. AT&T Mobility LLC (Fed. Cir. 2016)

- Claims directed to a system for filtering content retrieved from an Internet computer network are patent-eligible.
 - Filtering content is an abstract idea
 - **BUT** the non-conventional and non-generic arrangement of known, conventional elements can yield an inventive concept

Strategies for Patent Eligibility

- Focus the claims and the specification on technical improvements to computer technology or another field of technology
 - Federal Circuit decisions
- Analogize the claims to eligible claims in the Patent Office Examples
 - PTO Guidelines
- Avoid Technology Center (TC) 3600, which examines “business method” cases
 - Amend Title, Abstract, Field of Invention and Claim Preambles to present technical aspect of invention
 - If the application is in TC 3600, always interview (may require amending the claims)

Thank You!
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Orange County



Los Angeles



New York



San Diego



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Washington DC