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DIVIDED U.S. INFRINGEMENT: RISKS & OPPORTUNITIES

David Loretto
Lunes de Patentes 18 March 2024

DIVIDED INFRINGEMENT



Claims for which divided infringement matters

- Method claims that include steps performed by multiple entities
- System claims that include components used by different users

Risks for patent owners

- Difficult or impossible to prove infringement

Opportunities for accused infringers

- Escape liability

OUTLINE



- FISH NOT PATENTS: S.Ct. decision due in June could profoundly affect U.S. agencies
- USPTO: Already tightly bound by statutes and appellate caselaw
- APPELLATE CASELAW: Fed. Cir. and S.Ct
- PATENT ELIGIBILITY: Statutes; S.Ct. "*Alice-Mayo*" test and its effects
- DIVIDED INFRINGEMENT: Statutes; Fed. Cir. and S.Ct. caselaw
 - *Akamai*: direct vs. indirect infringement
 - *Akamai*, *Eli Lilly* and *Travel Sentry*: methods performed by multiple entities
 - *Centillion*, *NTP* and *Intellectual Ventures I*: systems used by multiple entities
- RECAP AND EXAMPLES
- RECOMMENDATIONS:
 - risks for claim drafters
 - opportunities for accused infringers
- QUESTIONS?

FISH NOT PATENTS



- Magnusson Stevens Act (1976) gives NOAA Fisheries authority to implement "conservation and management measures...**necessary and appropriate**...to **prevent overfishing**." 16 U.S.C. § 1853(a)(1)(A).
- Such "measures" include placing human monitors on commercial fishing boats
- 7 Feb. 2020 final rule requires herring boat owners to **pay for onboard monitors** (800 USD/day, 20% profits)
- Herring boat owners (with pro bono* assistance) challenged final rule in federal district courts (R.I. and D.C.)

* See, e.g., <https://nclalegal.org/relentless-inc-et-al-v-u-s-dept-of-commerce-et-al/>



FISH NOT PATENTS

- **Supreme Court argument 17 January 2024.** *Loper Bright Ent.*(22-452); *Relentless Inc.* (22-1219);
https://www.supremecourt.gov/oral_arguments/argument_audio/2023
- 40-year-old Supreme Court *Chevron* doctrine, under which courts defer to “reasonable” agency interpretations of silent/ambiguous statutes—**appropriate deference** to politically accountable and technically expert agencies **or** an **unconstitutional** violation of separation of powers/Art. III/5A (“Chevron bias”)?
- Could affect **vast amounts of federal regulations** (current & planned): DoE/FTC energy efficiency; EPA air/water quality; DoL “gig” workers; SEC climate risk, etc.
- Decision due **June 2024**



The New York Times

A Fight Over a Fishing Regulation Could Help Tear Down the Administrative State



By **Adam Liptak**

Reporting from Cape May, N.J.

Jan. 15, 2024



WSJ | OPINION

Congress and Chevron Deference

The judicial doctrine has made it easy to abdicate power to bureaucrats.

By The Editorial Board

Jan. 17, 2024 at 6:38 pm ET

FISH NOT PATENTS



Article I: Legislative



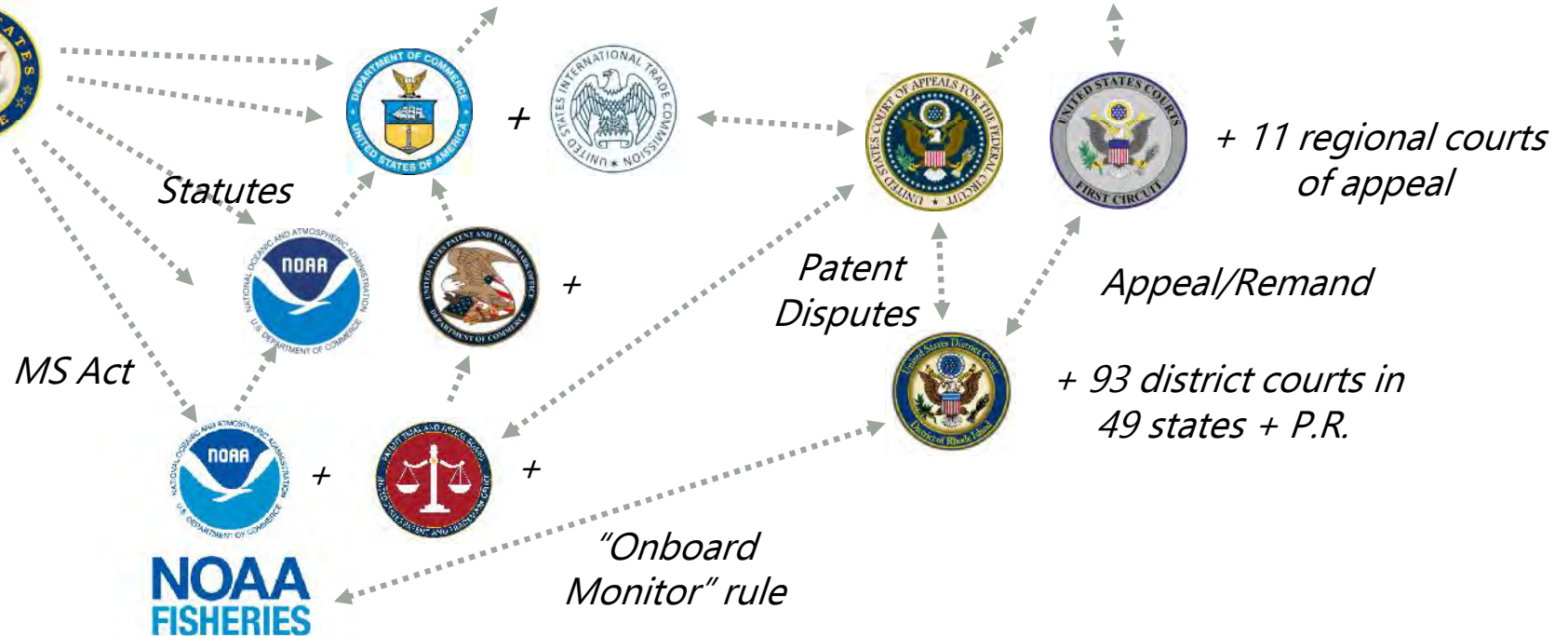
Article II: Executive



Article III: Judicial



Supreme Court



USPTO: BOUND BY STATUTES



- “The [USPTO]...**may establish regulations, not inconsistent with law**, which...**shall govern the conduct of proceedings** in the **Office**;”

35 U.S.C. §2(b)(2)(A) (emphasis added)

- “[T]he broadest of the PTO's rulemaking powers[] authorizes the Commissioner to promulgate regulations directed only to ‘the conduct of proceedings in the [PTO]’; it does **NOT grant** the Commissioner the **authority to issue substantive rules**...deference set forth in ***Chevron* does not apply.**”

Merck Co, Inc. v. Kessler, 80 F. 3d 1543, 1549-50 (Fed. Cir. 1996)
(quoting *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930 (Fed.Cir. 1991)) (emphasis added)

- Many governing statutes already clear, so USPTO usually receives **no *Chevron* deference**; e.g., final rule limiting numbers of RCE and continuation applications available as a matter of right struck down as **not consistent with** 35 U.S.C. §§ 132(a) and 120

Tafas v. Doll, 559 F.3d 1345 (Fed. Cir. 2009)

USPTO: BOUND BY STATUTES



1789: U.S. Const.: “**Congress shall have the power**...to promote the Progress of...useful Arts, **by securing for limited Times to...Inventors** the **exclusive Right** to their...Discoveries”. Art. I, sec. 1, cl. 8.

1790 & 93: First Patent Acts

1810: First **Patent Office** building funded (not burnt by British in 1814)

1836: Patent Act – (re)instates **examination** for novelty, written description, etc.

1952: “Modern” **Patent Act** - 35 U.S.C. §§ 1 et seq.

1982: FCIA – U.S. Court of Appeals for the **Federal Circuit**

1994: URAA – term **20-years from filing** (was 17-years from grant)

2000: AIPA – **18-month publication**

2011: AIA – **first-to-invent**; **PTAB** (patent “death squads”*)

2025?: PERA – patent eligibility; PREVAIL – limits on PTAB?

*Former Fed. Cir. Chief Judge Randall Rader, remarks at AIPLA annual meeting, Oct. 2013

USPTO: BOUND BY APPELLATE CASELAW



1790-1800: First patent cases in U.S. courts*

1856: "Sewing machine wars" ended by first U.S. patent pool**

2006: *eBay v. Mercexchange* (S.Ct.) – **injunctions** against **infringers** (§283)

2007: *KSR v. Teleflex* (S.Ct.) – **obviousness** determination (**§103**)***

2010-14: *Bilski-AMP-Alice-Mayo* (S.Ct.) – **exceptions to patent eligibility** (**§101**)****

2014: *Limelight v. Akamai* (S.Ct.) – induced and direct **infringers** (§271)

2015: *Akamai v. Limelight* (Fed. Cir.) (en banc) – divided **infringement** (§271)

2016: *Halo v. Pulse* (S.Ct.) – enhanced infringement **damages** (§284)

2018: *Oil States v. Greene* (S.Ct.): **PTAB/IPR constitutional** under Art. III, 7A

*B. Zorina Khan, *Property Rights and Patent Litigation in Early Nineteenth Century America, 1790-1820* (2007);

Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine Wars of the 1850s*, 53 Ariz. L. Rev. 165 (2011); **Updated Guidance for Making a Proper Determination of Obviousness*, 89 FR 14449 (27 Feb. 2024); *****October 2019 Patent Eligibility Guidance Update*, 84 FR 55942 (18 Oct. 2019) (now MPEP §§ 2103 to 2106.07(c))

USPTO: VALIDITY, NOT INFRINGEMENT



- USPTO examination and reexamination focuses, naturally, on **patentability/validity** — whether a patent should issue/should have issued – and, enforceability, to extent submission of IDS, disclosure of material prior art, required
- USPTO examination **not concerned with infringement** and related issues – damages, injunctions, etc.
- Though USPTO, in its validity determinations, must follow and implement statutes and ever changing case law (Supreme Court and Federal Circuit) regarding validity, can **blissfully ignore** statutes and **case law regarding infringement** and related issues – damages, injunctions, etc. – that appears as a result of disputes between patent owners and alleged/actual infringers.

APPELLATE CASELAW: FEDERAL CIRCUIT



- Decides appeals from district court patent disputes ($\approx 30\%$ total cases), USITC ($\approx 1\%$ total cases) and USPTO/PTAB ($\approx 20\%$ total cases)
- Usually, three-judge **panel** decides and issues:
 - Rule 36 affirmance ($\approx 1/3$ patent cases)
 - Non-precedential opinion ($\approx 1/3$ patent cases)
 - **Precedential** opinion ($\approx 1/3$ patent cases)
- Very rare: panel of all (12) active judges decides and issues **en banc** opinion:
 - Question of **exceptional importance**
 - Maintain **uniformity** or **overrule** a **panel**

See <https://empirical.law.uiowa.edu>



Official portrait
2018

APPELLATE CASELAW: SUPREME COURT



- **Generalist** court with **institutional** interests; accepts fewer than 100 of around 10,000 petitions filed annually
- **Argued today:** *Murthy v. Missouri* on injunction barring White House, CDC, FBI, etc. from pressuring social media platforms to remove lawful content; *NRA v. Vullo* on NY financial regulators pressuring of banks and insurance companies to not do business with gun advocacy group
- For the rare patent case from the Federal Circuit – whether originated in USPTO or district court – decision is **final interpretation of patent law**



"We are not final because we are infallible, but we are infallible only because we are final."

Justice Robert Jackson 1892-1954 (not pictured)

PATENT ELIGIBILITY: STATUTES



- Four categories of **patent eligible** subject matter:
 - “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, subject to the conditions and requirements of this title.”

35 U.S.C. §101 (enacted 1952)

- Two categories of **patent ineligible** subject matter:
 - “No patent shall hereafter be granted for any invention or discovery which is useful solely in the utilization of special nuclear material or atomic energy in an **atomic weapon**.”

42 U.S.C. §2181(a) (enacted 1954)

- “Notwithstanding any other provision of law, no patent may issue on a claim directed to or encompassing a **human organism**.”

AIA §33(a) (enacted 2011)

PATENT ELIGIBILITY: S.C.T. *ALICE-MAYO* TEST



- Judicial **exceptions** to the four categories—process, machine, manufacture, or composition of matter—in §101, for “**abstract ideas, laws of nature or natural phenomena** (includes products of nature)”

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 216 (2014) (citing *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013) (emphasis added))

- Judicial **exceptions** cover the “**basic tools of scientific and technological work**”, for which granting patents would “inhibit future innovation.”

Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 71, 86 (2012) (emphasis added)

- “[W]e must distinguish between patents that claim the ‘building blocks’ of human ingenuity and those that **integrate the building blocks into something more**”

Alice, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 89) (emphasis added and annotations omitted)

USPTO MUST FOLLOW *ALICE-MAYO*



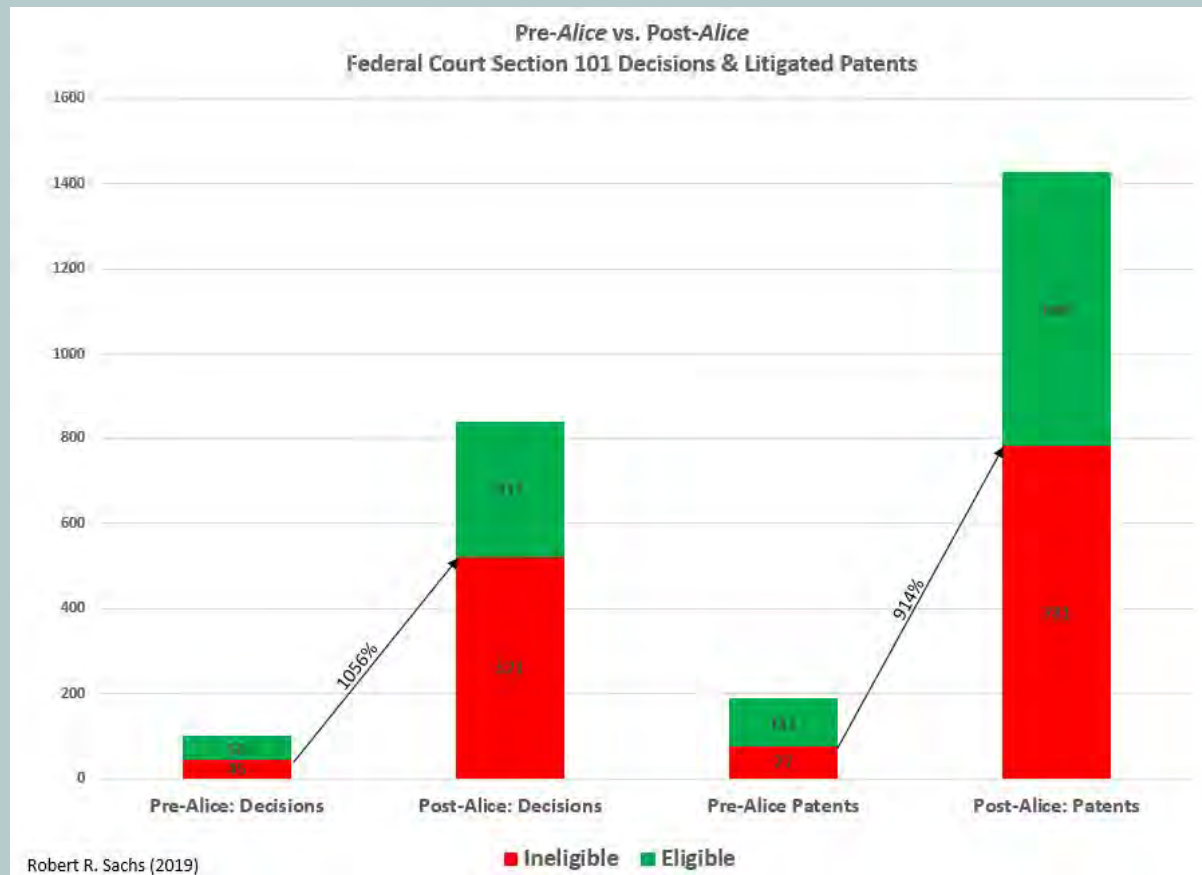
- “The **Supreme Court has explained** that the judicial exceptions reflect **the Court’s view** that **abstract ideas, laws of nature, and natural phenomena** are ‘the basic tools of scientific and technological work’, and...**excluded from patentability.**”

MPEP § 2106.04.II.A.2

- “The first part of the [*Alice*]/*Mayo* test is to determine whether the claims are directed to an **abstract idea**, a **law of nature** or a **natural phenomenon** (i.e., a judicial exception). [If so], the second part of the [*Alice*]/*Mayo* test is to determine whether the claim recites **additional elements** that amount to **significantly more** than the **judicial exception....**
- The ***Alice/Mayo*** two-part test is the **only test that should be used** to evaluate the eligibility of claims under examination. .”

MPEP § 2106.04

COURTS MUST FOLLOW ALICE-MAYO



- <https://www.ipwatchdog.com/2019/08/29/alice-benevolent-despot-or-tyrant-analyzing-five-years-of-case-law-since-alice-v-cls-bank-part-i/id=112722/>

ALICE-MAYO: DIAGNOSIS + TREATMENT



- U.S. Pat. 6,258,540 (**10 July 2001**) NON-INVASIVE PRENATAL DIAGNOSIS – no §101 rejections during prosecution - “1. A method for **detecting a paternally inherited nucleic acid** of fetal origin performed on a **maternal serum** or **plasma** sample from a pregnant female”
- “[T]he discovery of [cell-free fetal] DNA...is **not patentable**.”
Ariosa Diagnostics, Inc. v. Sequenom, inc., 19 F.Supp.3d 938, 950 (N.D. Cal. **2013**)
(quoting *Mayo*, 566 U.S. at 82), affirmed 788 F.3d 1371, 1378 (Fed. Cir. 2015), cert. denied 27 June 2016
- U.S. Pat. No. 8,586,610 (**19 Nov. 2013**) METHODS FOR THE ADMINISTRATION OF ILOPERIDONE – some §101 rejections during prosecution – “[T]he claims here are directed to a **specific method of treatment** for specific patients using a specific compound at specific doses to achieve a specific out-come ... different from *Mayo*. ... Accordingly, the claims are patent eligible.”
Vanda Pharm. v. West-Ward Pharm., 887 F. 3d 1117, 1136 (Fed. Cir. **2018**), cert. denied 13 Jan. 2020
- “[A claim to a diagnostic method is patent eligible] when the **additional elements** apply or use the recited judicial exception to **effect a particular treatment** or prophylaxis for a disease or medical condition.”

MPEP 2106.04(d)(2) (citing *Vanda Pharm.*, 887 F.3d 1117

ALICE-MAYO: UNCERTAINTY & CONFUSION



- "**Alice**...has created a tremendous amount of **uncertainty** for innovators and **severely restricted** the patent eligibility of **high-tech** and **biopharmaceutical** innovations."

Prof. Adam Mossoff, PERA Senate Testimony, **23 Jan. 2024**. https://www.judiciary.senate.gov/committee-activity/hearings/the-patent-eligibility-restoration-act_restoring-clarity-certainty-and-predictability-to-the-us-patent-system

- "**101 jurisprudence eliminates whole swaths of the technological universe** before they even get a chance to be tested against [novelty], [obviousness], and enablement/clarity/support].... [C]utting-edge fields ... most in need of patent protection [are] entirely excluded from the patent system. [Resulting in] **reduced investment** and **reduced innovation** in ... **medical diagnostics, biotechnology, software, blockchain** and **artificial intelligence (AI)**."

Hon. David J. Kappos, *ibid.*

- "[A] **patchwork** of [court] decisions over time, struggling to keep up with fast-changing technologies, has created **significant confusion** and **uncertainty** as to what is in and what is outside the **bounds of [§101]**."

Hon. Andrei Iancu *ibid.*

ALICE-MAYO & DIVIDED INFRINGEMENT



- Under *Alice-Mayo*'s two-step inquiry, claims that recite "abstract ideas", "laws of nature" or "natural phenomena"—must cover "**substantially more**" to be patent eligible

e.g., method for diagnosis **and** treatment

- Claims that include "substantially more", all else being equal, more likely to involve **action** by **multiple entities** and implicate direct infringement

e.g., one entity does a testing step, another entity does a treatment step



John Tenniel illustration for Lewis Carroll, *Alice's Adventures in Wonderland* (Macmillan 1865)

ART 53(C) EPC & DIVIDED INFRINGEMENT?



- "1. A method of associating a plurality of objects, the method comprising the steps of...**selecting, by the caregiver using the medical device,** a specific medication of the list"
- "[T]he step of **selecting a medication**..does not form a barrier to patentability of the independent claims" under Art 53(c) EPC

T 3124/19 (Automatic association of medical elements/CAREFUSION) 12-12-2023)

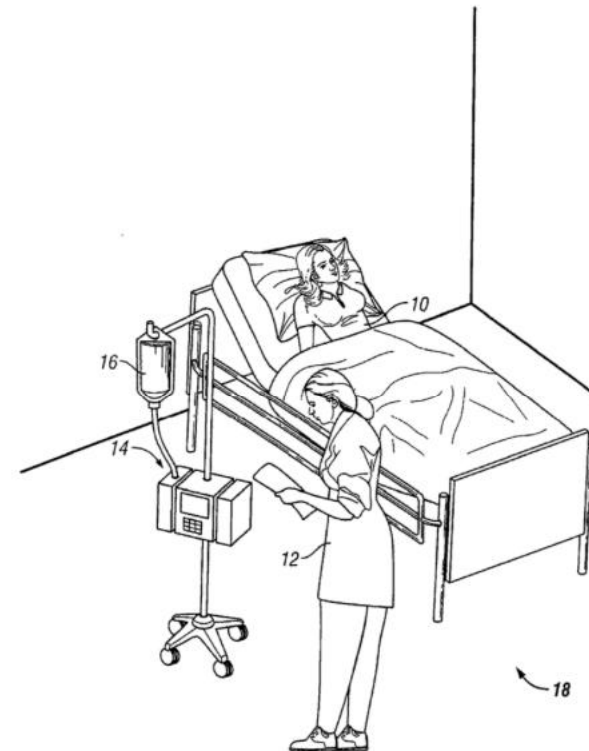
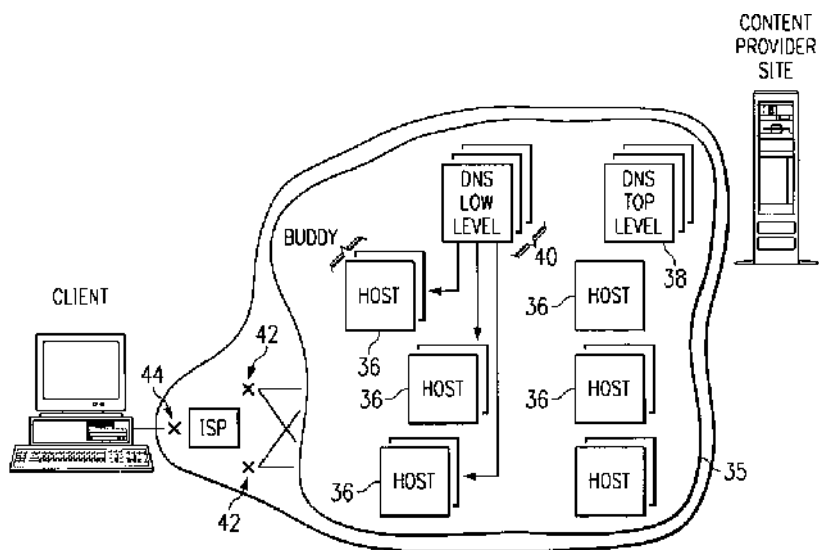


FIG. 1

DIVIDED INFRINGEMENT: METHOD & SYSTEM



Method comprising **steps** performed by **multiple entities** (e.g., client requesting a web page; server responding to a request to serve a web page)



System that is **used by multiple entities** (e.g., doctor and patient)

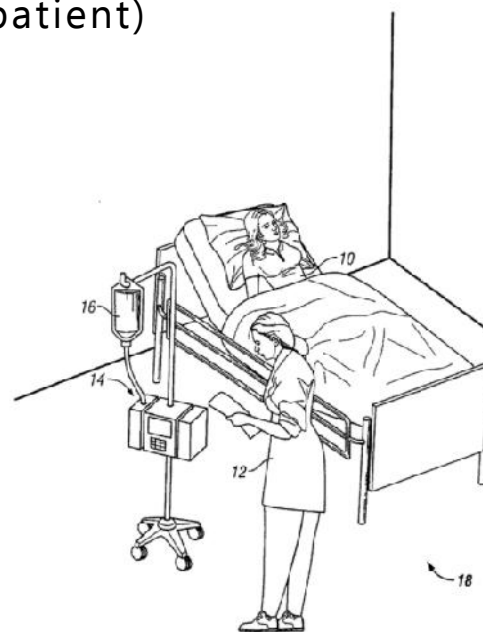
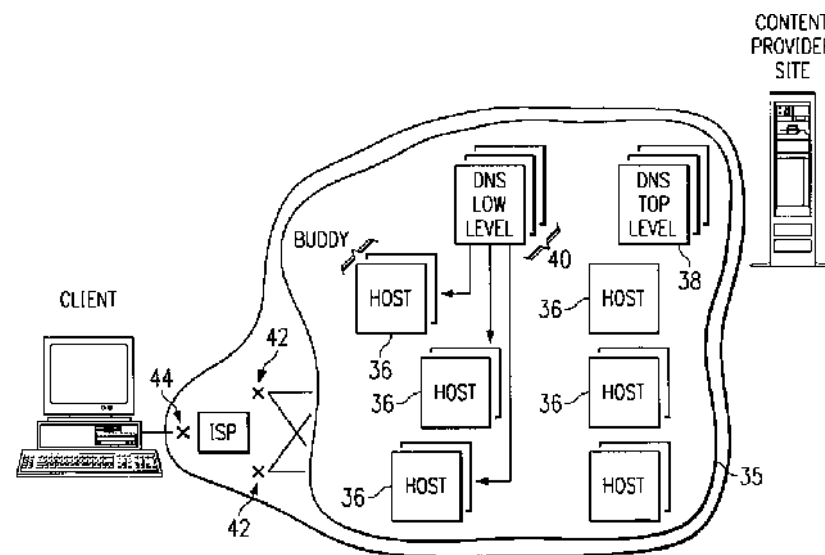


FIG. 1

U.S. PAT. 6,108,703 (MIT, EXCL. LIC. AKAMAI)



- 19. A content delivery **service**, comprising:
...for a given page normally served from the content provider domain, **tagging the embedded objects** of the page so that requests for the page objects **resolve to the domain instead of the content provider domain**;
- 34. A content delivery **method**, comprising:
...for a given page normally served from the content provider domain, **tagging** at least some of **the embedded objects** of the page so that requests for the objects resolve to the domain instead of the content provider domain;



AKAMAÏ: 45.5M FOR INFRINGING US '703



July 1998: MIT provisional, Global Hosting Network (Leighton & Lewin), filed

Aug 1998: Akamai formed; **exclusive license** to MIT provisional

Feb 1999: Akamai delivers first commercial content (for Disney)

Aug 2000: **U.S. Pat. 6,108,703**, priority to provisional, issues

Spring 2004: Akamai, having successfully sued other competitors for infringing '703 patent, in talks with Limelight re possible acquisition

22 June 2006: Limelight tells Akamai, no longer interested in being acquired

23 June 2006: **Akamai & MIT v. Limelight**, D. Mass. for infringing '703 Patent

Feb 2008: D. Mass. (Boston) jury finds **infringement by Limelight** of claims 19-21 & 34 and awards Akamai **45.5M**

June 2008: D. Mass. Judge Zobel denies Akamai's injunction request...

See <https://www.akamai.com/company/company-history> and *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 614 F.Supp.2d 90, 100 (D. Mass. 2009)

DIRECT v. INDIRECT INFRINGEMENT § 271



Direct

“(a) Except as otherwise provided in this title, **whoever** without authority makes, **uses**, offers to sell, or sells any **patented invention**, **within** the **United States**[*] or imports into the United States any patented invention ... **infringes the patent.**”

* An offer “made in Norway by a U.S. company to a U.S. company to sell a product within the U.S., for delivery and use within the U.S. constitutes an offer to sell.” *Transocean v. Maersk*, 617 F.3d 1296, 1309 (Fed. Cir. 2010)

Indirect

“(b) Whoever **actively induces** infringement of a patent shall be liable as an infringer. (c) Whoever **offers to sell** or **sells** within the United States or **imports** into the United States a **component**...or a **material** or **apparatus** ... **knowing the same** to be especially made or especially adapted for use in an infringement of such patent ... shall be liable as a **contributory infringer.**”

** §271(f), “supply” of “components” for combination outside the United States, and §271(g), “import” of “a product” into the United States, require no separate direct infringement

AKAMAI: 45.5M AWARD IN DOUBT



July 2008: Fed. Cir. – *Muniauction*, 532 F.3d 1318, 1329 (Fed Cir. 2008) (“‘arms-length cooperation’ will not give rise to direct infringement.”)

April 2009: D. Mass. – Judge Zobel applies *Muniauction*, revokes 45.5M award; some steps, e.g., **tagging, not performed by Limelight**, but by **its customers**

Dec 2010: Fed. Cir. – Limelight not liable for acts of its customers since no principal-agent relationship

Aug 2012: Fed. Cir. en banc – Limelight did not directly infringe but did induce infringement by its customers

June 2014: S.Ct. – Limelight **cannot induce infringement in the absence of direct infringement**; remands re divided direct infringement

May 2015: Fed. Cir. – Limelight did not directly infringe, since neither principal-agent nor subcontractor relationship with its customers, nor in a joint enterprise

Aug 2015: Fed. Cir. en banc – Limelight did directly infringe, is liable for the acts of its customers because **Limelight directs or controls its customers**

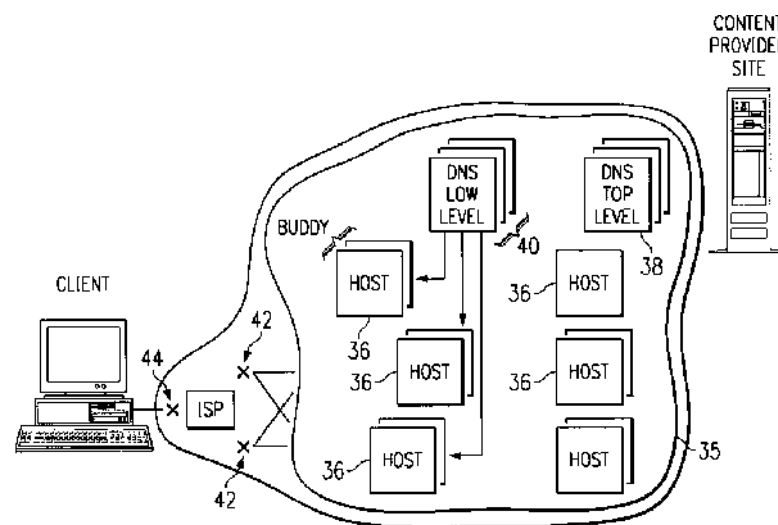
Nov 2015: Fed. Cir. – remands to D. Mass...

AKAMAÏ: INDIRECT INFRINGEMENT REQUIRES DIRECT INFRINGEMENT



- “[I]nducement liability may arise if, but **only if**, there is **direct infringement**.
- A **method** patent ... is not infringed unless **all** the **steps** are carried out.
- Limelight cannot be liable for inducing infringement that never came to pass.”

Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S.Ct. 2111, 2117-18 (2014) (referencing decision on §271(c) in *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 341 (1961))
(quotation marks and annotations omitted)



AKAMAÏ: MULTI-ENTITY METHOD



"An actor is liable for [direct] infringement under § 271(a) if it acts through an **agent** or **contracts** with another to perform one or more **steps** of a claimed **method**....

also

(1) where that entity **directs or controls others' performance**,...

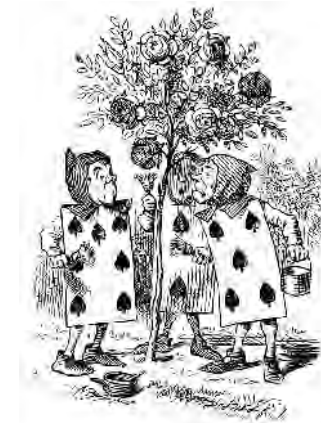
(2) where the **actors form a joint enterprise**"

Akamai Techs., Inc. v. Limelight Networks, Inc. 797 F.3d 1020, 1022-23 (Fed. Cir. 2015) (en banc) (citations omitted)

"directs or controls"



"joint enterprise"



AKAMAII: "JOINT ENTERPRISE"



"A **joint enterprise** requires proof of four elements:

1. an **agreement**, express or implied, among the members of the group;
2. a **common purpose** to be carried out by the group;
3. a **community of pecuniary interest** in that purpose, among the members; and
4. an equal right to a voice in the direction of the enterprise, which gives an **equal right of control**."

797 F.3d at 1023 (citations omitted)



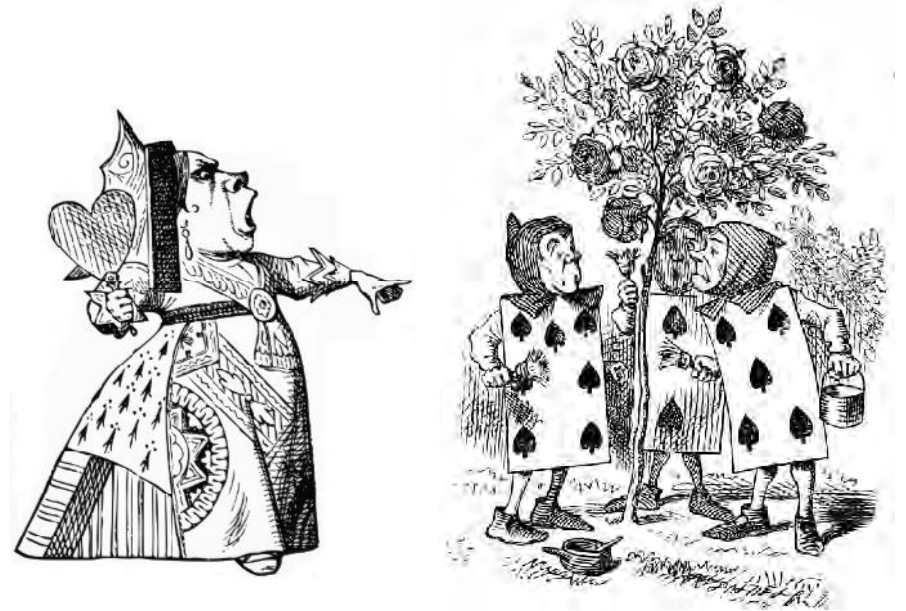
AKAMAII: "DIRECTS OR CONTROLS"



"[I]f a single entity **directs or controls** the acts of another... liability under § 271(a) can **also** [i.e., in addition to contracting for performance of a step or on basis of principal-agent, e.g., **employer-employee**, relationship] be found when an alleged infringer[:]

- **conditions participation in an activity or receipt of a benefit upon performance of a step** or steps of a patented **method; and**
- establishes the **manner** or **timing** of that performance."

797 F.3d at 1022-23 (citation omitted)



AKAMAI: "DIRECTS OR CONTROLS"

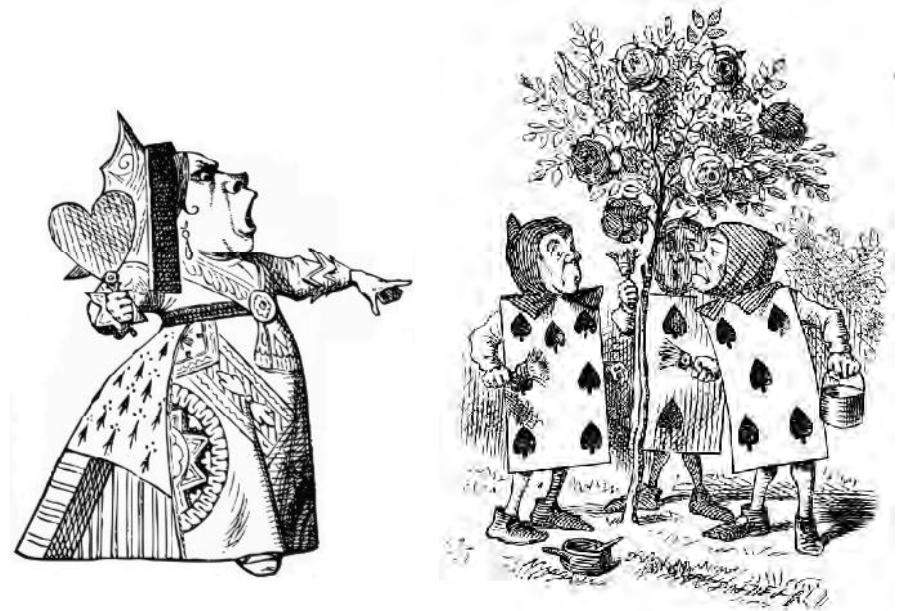


- **Evidence:** language in Limelight customer contracts, customer interactions with Limelight engineers, etc.:
- "**Limelight conditions** customers' **use** of its **content delivery network upon** its customers' **performance of the tagging** and **serving** method **steps**."

establishes the **manner** and **timing** of its **customers' performance** so that customers can only avail themselves of the service upon their performance of the method steps.

Limelight ... liable for direct infringement."

797 F.3d at 1024-25 (citation omitted)



AKAMAÏ: 51.1M AWARD REINSTATED



30 June 2016: D. Mass. – Judge Zobel awards **Akamai 51.1M**

2 April 2018: Akamai and Limelight settle patent disputes – after **only 12 years of litigation**

<https://www.businesswire.com/news/home/20180402005634/en/Limelight-Networks-and-Akamai-Technologies-Settle-All-Outstanding-Legal-Dispute>

- In *Akamai*, U.S. '703 **method** claims covered steps that could be performed by **multiple parties**, requiring proof of **divided direct infringement**, complicating the dispute
- With hindsight, **method** claims could have been drafted to cover actions of only a **single entity** and not require proof of **divided direct infringement**

S

AKAMAI APPLIED: *ELI LILLY*



- Eli Lilly's U.S. Pat. 7,772,209 (10 Aug 2010) claims **methods**:
 - **Pretreatment** with common vitamins: administer folic acid (**patient**) & B12 (**doctor**); and
 - **Treatment** by administration of chemotherapy drug pemetrexed (**doctor**)
- Teva: **indirect** infringer (ANDA "Hatch-Waxman" §271(e)(2))
- Doctor (with patient): **direct** infringer of '209 Patent
- Do doctors "**direct** or **control**" their patients' administration of folic acid?

Eli Lilly & Co. v. Teva Parenteral Medicines, 845 F.3d 1357, 1361, 1364 (Fed. Cir. 2017)

AKAMAI APPLIED: *ELI LILLY*



- Information to be provided by Teva to prescribing doctors, product labelling, and expert testimony all support conclusion that doctors would:
 - **condition** patients' **receipt of pemetrexed** treatment on **patients' administration of folic acid**
 - establish the **manner** and **timing** of patients' folic acid intake

Eli Lilly, 845 F.3d at 1365-67

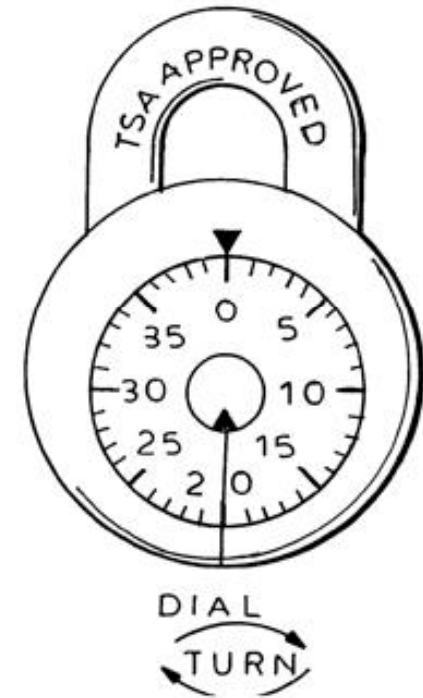
- "Our holding today does **not** assume that patient action is **attributable** to a prescribing physician **solely because they have a physician-patient relationship.**"

Id. at 1368

AKAMAI EXTENDED: *TRAVEL SENTRY*



- Tropp's U.S. 7,021,537 (4 April 2006) and 7,036,728 (2 May 2006) claim **methods** of improving carrier baggage inspection by a screening entity [e.g., TSA], comprising:
- providing travellers with a dual access baggage lock, comprising a **combination lock** accessible to travellers and a **passkey lock** accessible to security staff
- providing **passkey** to security staff
- **signalling to security staff**, using indication on dual access lock, passkey accessibility
- **security staff**, pursuant to prior agreement, **looking for indication** of passkey accessibility and, if necessary, opening baggage using master key



Travel Sentry, Inc. v. Tropp,
877 F.3d 1370 (Fed. Cir. 2017)

AKAMAI EXTENDED: TRAVEL SENTRY



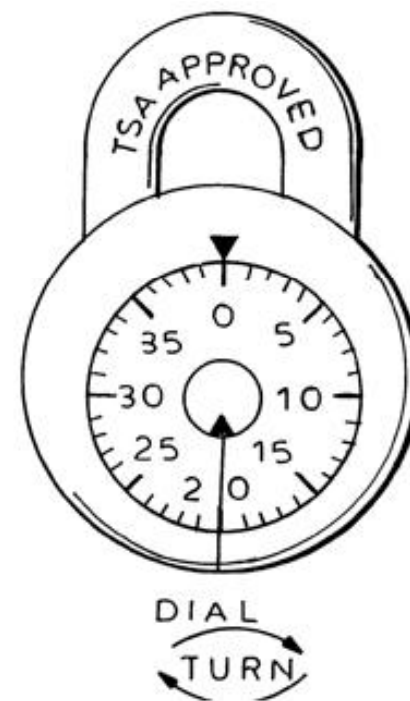
Advances an alternative, **looser, standard** for demonstrating “**direction or control**” over a step or steps, could be shown by possession of “**right and ability to stop or limit**” the other entity’s performance of that step or steps (analogizes to provision of peer-to-peer file sharing in copyright):

- “[A]n actor ‘**infringes vicariously**’ by profiting from direct infringement’ if that actor has the **right** and **ability to stop or limit** the **infringement**.”

Travel Sentry, 877 F.3d at 1385 (quoting *Akamai*, 797 F.3d at 1023 citing *MGM v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005))

- “Travel Sentry [**could** direct and control, since] ‘has the **right** and **ability to stop or limit**’ TSA’s ability to practice the **final two claim steps**...including [by] terminating the MOU, [not] replacing passkeys...changing the design of future locks.”

Id. at 1385

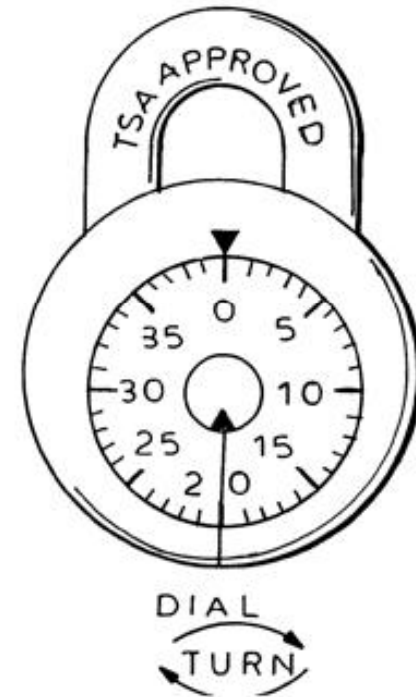


AKAMAI EXTENDED: *TRAVEL SENTRY*



- Eventually resolved, not in inventor Tropp's favor, under **§101**:
- "[T]he Court finds that Tropp's claims are directed to an ineligible **abstract idea**, namely the **application of dual-access locks to airport luggage inspection**. The Court agrees with Travel Sentry that Tropp's method patents have essentially described the basic steps of using and marketing a dual-access lock for luggage inspection, a long-standing fundamental economic practice and method of organizing human activity."

Travel Sentry v. Tropp, 527 F. Supp.3d 256, 265 (E.D. N.Y. 2021)
affirmed Civ. No. 2021-1908 (Fed. Cir. Feb. 14, 2022) cert. denied 15
May 2023



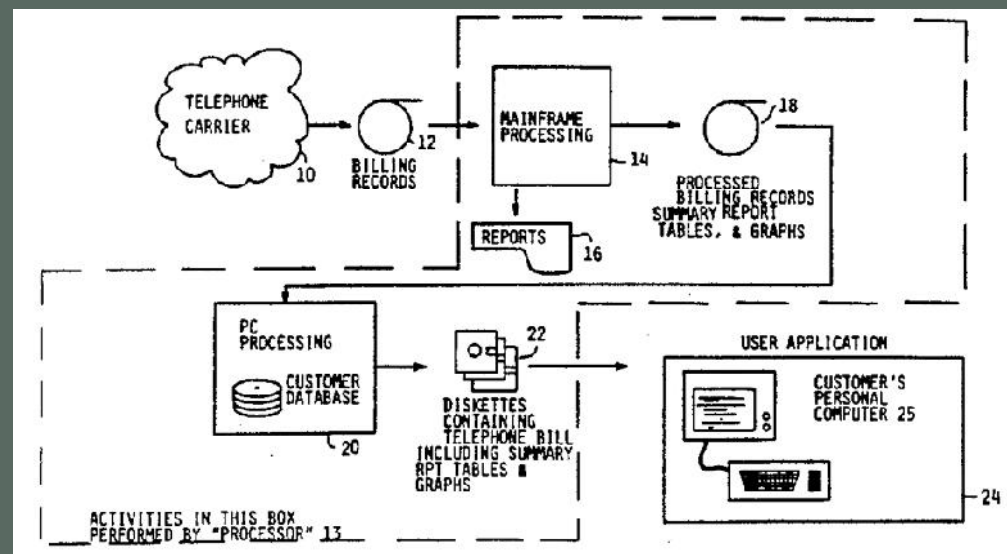
CENTILLION: MULTI-USER SYSTEM



- "1. A **system** for presenting information concerning the actual cost of a service provided to a user **by a service provider**, said system comprising:...storage means...data processing means...display on a **personal computer data processing means**..."
- "While Qwest may make the **back-end processing elements**, it never "uses" the entire claimed system because **it never puts into service the personal computer data processing means**. Supplying the software for the customer to use is not the same as using the system.

- *Data Sys., LLC v. Qwest Comm. Int'l, Inc.*, 631 F.3d 1279, 1286 (Fed- Cir. 2011)

U.S. 5,287,270, BILLING SYSTEM (15 Feb. 1994)

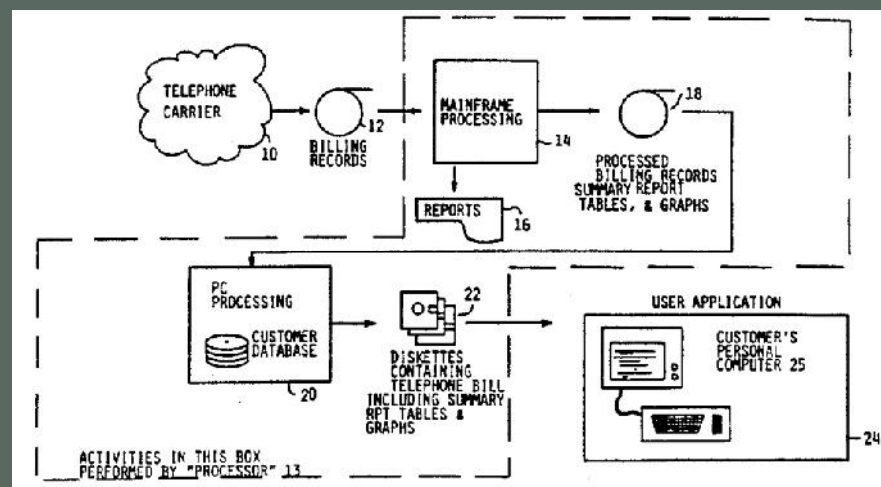


CENTILLION: MULTI-USER SYSTEM



- "1. A **system** for presenting information concerning the actual cost of a service provided to a user **by a service provider**, said system comprising:...storage means...data processing means...display on a **personal computer data processing means**..."
- "[T]o '**use**' a **system** for purposes of infringement, a party must put the invention into service, i.e., **control the system as a whole** and **obtain benefit from it**..."
 - *Centillion*, 631 F.3d at 1284 quoting *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1317 (Fed. Cir. 2005)

U.S. 5,287,270, BILLING SYSTEM (15 Feb. 1994)

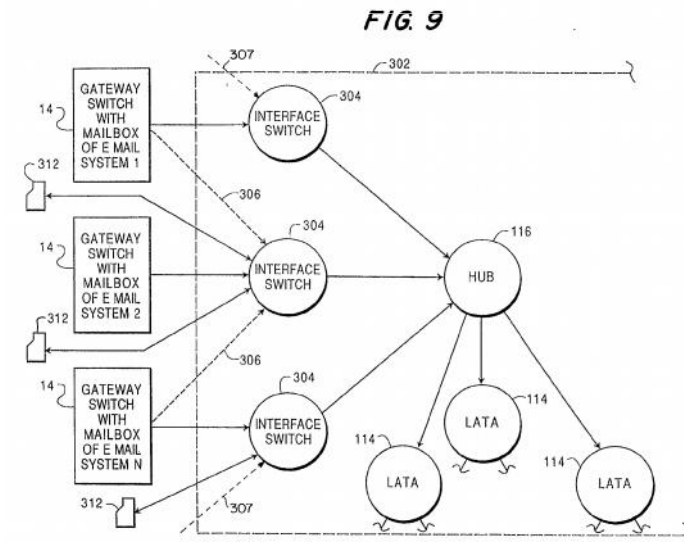


NTP: EXTRATERRITORIAL METHODS/SYSTEMS



- "1. A **system** for transmitting originated information...**in an electronic mail system**...comprising:
at least one gateway switch...
a RF information transmission network...at least one **interface switch**...."
- "18. A **method** for transmitting originated information...**in an electronic mail system**...comprising:
transmitting the originated information ...to a gateway switch...; transmitting the originated information from the gateway switch **to an interface switch**;
transmitting...**from the interface switch** to a RF information transmission network..."

U.S. 5,436,960, ELECTRONIC MAIL SYSTEM WITH RF COMMUNICATIONS TO MOBILE PROCESSORS AND METHOD OF OPERATION THEREOF (25 July 1995)



NTP: EXTRATERRITORIAL METHODS/SYSTEMS



- “The use of a claimed **system**...is the...place where **control**...is **exercised** and **beneficial use**...**obtained**....RIM’s customers located within the United States controlled the transmission of the originated information and also benefited from such an exchange of information. Thus, the location of **the [interface switch] in Canada did not**, as a matter of law, **preclude infringement** of the asserted **system claims**
- [A] **process** cannot be **used** "within" the United States as required by section 271(a) unless **each of the steps is performed within this country**. [E]ach of the asserted method claims...recites a step that utilizes an "interface" or "interface switch," which is only satisfied by the use of RIM's Relay **located in Canada**....[T]hese claimed methods **could not be infringed** by use of RIM's system.”



NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1317-18 (Fed. Cir. 2005)
(citations omitted)

INT'L VENTURES: MULTI-USER SYSTEM



- "A system comprising a 'communications device,' a 'second device,' and an 'authenticating device configured to ... generate a delivery report.'..."
- "Motorola contends that IV failed to offer evidence of a directly infringing 'use' of the claimed system because **none of the accused direct infringers 'used' the 'authenticating device configured to ... generate a delivery report.'**.... *Centillion* and *NTP* held that to 'use' something is to put it into service, which means to control and benefit from it. And *Centillion* explicitly added that, to use a claimed system, what must be "used" is each element. ... [I]t follows that, to **use a system**, a person must **control** (even if indirectly) and **benefit** from **each claimed component**."
 - *Intellectual Ventures I v. Motorola Mobility*, 870 F.3d 1320, 1328-29 (Fed. Cir. 2017)

INT'L VENTURES: MULTI-USER SYSTEM



- "With respect, **my colleagues are incorrect.** ... *Centillion* **did not establish** a new requirement for infringement whereby a **user must benefit from every element of the system.** ...
- See *Centillion*, 631 F.3d at 1285 ("By causing the system as a whole to perform this processing and obtaining the benefit of the result, the customer has 'used' the system under § 271(a).").
- This definition of 'use' properly captures the scope of infringement for which *Centillion* stands."

Intellectual Ventures I, 870 F.3d at 1333 (**Newman**, J. dissenting opinion); see also <https://nclalegal.org/re-complaint-against-circuit-judge-pauline-newman/>



DIVIDED INFRINGEMENT RECAP: METHODS



- The multiple entities form a **joint enterprise** (*Akamai*)
- One entity "**directs**" or "**controls**" performance of the steps it does not itself perform, by:
 - **conditioning participation** in an **activity** or **receipt of a benefit** upon the other entities' **performance of the steps, and**
 - establishing the **manner or timing** of that **performance**. (*Akamai*)
- One entity has the "**right**" and "**ability**" to "**stop**" or "**limit**" the the action of other entities that lead to infringement. (*Travel Sentry*)



DIVIDED INFRINGEMENT RECAP: SYSTEMS



- One entity need not itself use every single component but must **control the system as a whole** and **obtain benefit from its use**. (*Centillion*)
- One entity must **control** (even if indirectly) and **benefit from each claimed component**." (*Intellectual Ventures I*)



DIVIDED INFRINGEMENT RECAP: CONTEXT



Methods: a customer's actions can be attributed to supplier, based on:

- Supplier's provision of **instructions**, materials, **technical support**, etc.; or
- Supplier's **right** and **ability** to **stop** or **limit** the infringement

Systems: a customer's use of a system can be attributed to supplier, based on:

- Supplier's **control** of the **system as a whole**; and
- Supplier's **obtaining a benefit from the use** of (each component of?) the system

EXAMPLE: *INFORMATION IMAGES V. PGA TOUR, INC. (2023)*



"Using handheld devices and laser rangefinders, **ShotLink operators capture 256,000 pieces of data each week**. State-of-the-art servers, installed and configured by the CDW Professional Services team, store and analyze this data aboard the ShotLink Nerve Center truck. **Golf fans and journalists** around the world can access **ShotLink data via PGATOUR.com** to keep up with tournament rankings, while players can track their progress over time to help improve their game"

<https://www.pgatour.com/shotlink>



EXAMPLE: *INFORMATION IMAGES V. PGA TOUR, INC.* (2023)



"A **system** of gathering, processing, and distributing information of a **golf tournament** over a wireless network, comprising:

...

- a **first portable device** configured to be carried by a broadcast or other authorized **spotter** of the golf tournament, ...
- a **second portable device** carried by a **patron** of the sporting event to receive transmitted input data over the wireless network, and to **selectively display current statistics**..."

U.S. Pat. 9,806,832, claim 1 (31 Oct 2017)

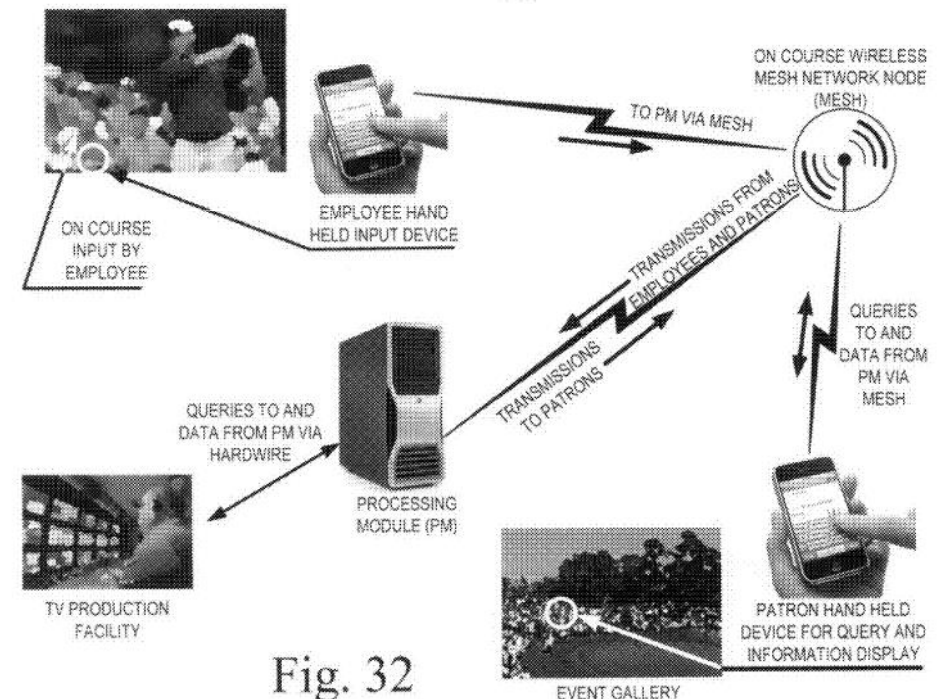


Fig. 32

EXAMPLE: *INFORMATION IMAGES V. PGA TOUR, INC.* (2023)



“PGA TOUR **does not control** the **accused system** because PGA TOUR's **patrons** put the accused system into service by initiating, on the ‘**second portable device**,’ a demand for service that causes back-end components ... to act out their intended purpose.

...
PGA TOUR **patrons**, therefore, **control this portion of the accused system**—not the PGA TOUR. ... [A]s in *Centillion*, it is of no moment that PGA TOUR supplies the software for the customer to use.”

6:20-cv-0268-ADA (Aug. 2, 2023 W.D. Tex.) III.B.1
(citations and quotations omitted and emphasis added)



EXAMPLE: *INFORMATION IMAGES V. PGA TOUR, INC.* (2023)

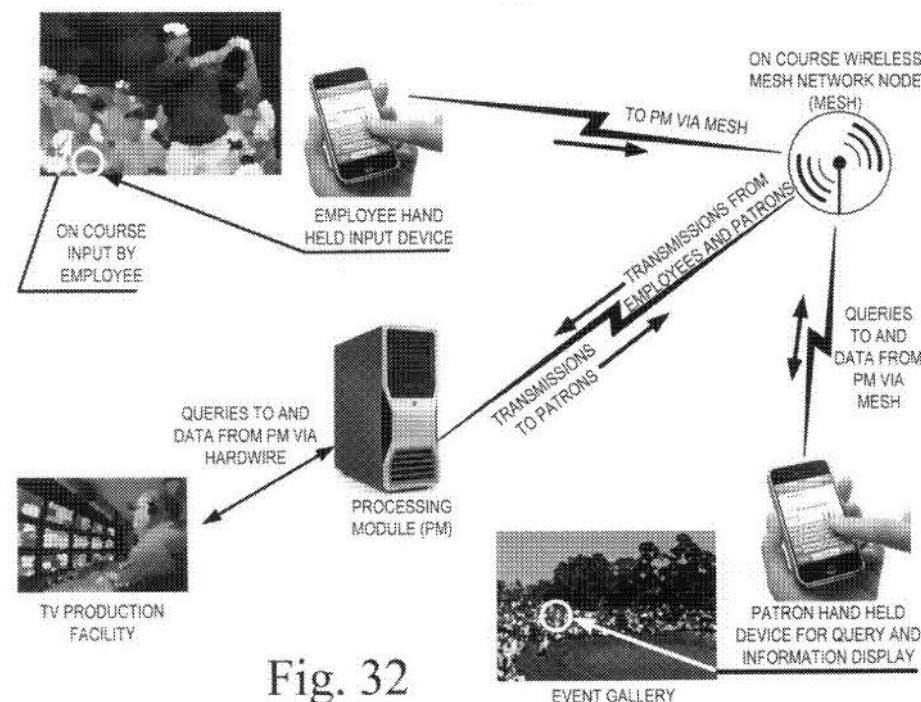


"A **method** of gathering, processing, and distributing **information** of a **golf tournament** over a wireless network, the method comprising:

providing a **first portable device** to be carried by a broadcast or other authorized spotter

...
selectively displaying graphical representations of the data on the **second portable device** according to **inquiries** of the patron."

U.S. Pat. 9,806,832, claim 5 (31 Oct 2017)



EXAMPLE: *INFORMATION IMAGES V. PGA TOUR, INC.* (2023)



“PGA TOUR has **not conditioned participation** in the **activity**, or **receipt of the benefit**, on **making inquiries on a portable device** ... other options ... are available.

...
Nothing in [the EULA] requires or instructs users to perform any actions required by the ... claims ... users are free to **make data inquiries whenever they want** ... after a golf play, or years later. **[M]anner and timing** ... is **not dictated by PGA TOUR.**”

6:20-cv-0268-ADA (Aug. 2, 2023 W.D. Tex.)

III.A.1.b & 2 (citations omitted and emphasis added)



EXAMPLE: *IOENGINE V. PAYPAL & INGENICO* (2022)



A **portable device** configured to communicate with a terminal

...

a **communication** to be transmitted to the communication network node

...

[that] facilitates **verification** of the portable device.

U.S. Pat. 9,059,969, claim 3 (16 June 2015)

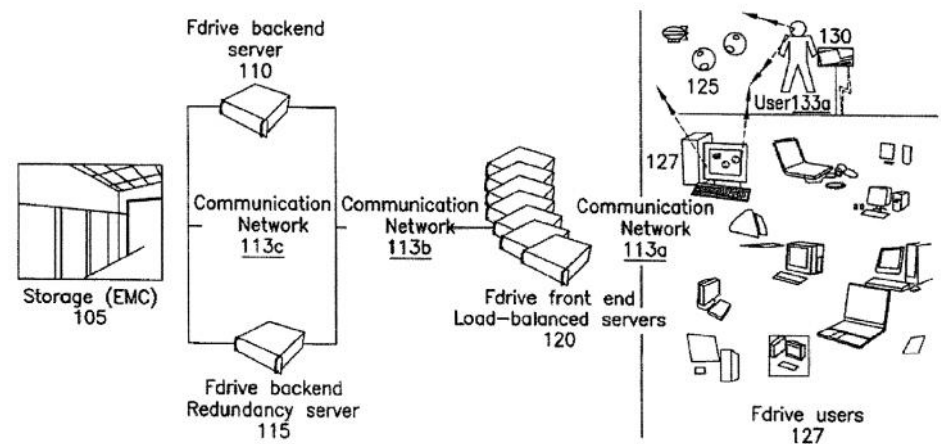


Fig. 1

EXAMPLE: *IOENGINE V. PAYPAL & INGENICO* (2022)



"PayPal's accused products comprise ... **Here** and **Zettle**. ... **PayPal provides a free mobile application to merchants** who can then **accept credit card payments using a card reader that PayPal supplies** to the merchants at little or no cost. ... PayPal Here ... supports four different card readers: one supplied by ... Miura Systems Limited, and three supplied by Ingenico. PayPal's Zettle product line supports only ... the "Zettle 2" reader ... supplied by ... Datecs Ltd.

...
Viewing the evidence in the light most favorable to IOENGINE, a jury could reasonably find that PayPal **controls** the **manner and timing** of the **merchants' performance of the claimed method steps**. Accordingly, **PayPal is not entitled to summary judgment of no [divided] infringement.**"

607 F. Supp.3d 464, 481, 497 (D. Del. 2022)
(citations omitted and emphasis added)



EXAMPLE: *IOENGINE V. PAYPAL & INGENICO* (2022)



"Ingenico's accused products are **mobile credit card readers** for use by **merchants** who **run** a payment processing **software** application on a smartphone or tablet.

...
The majority of **Ingenico's customers...write their own applications** using Ingenico's Application Programming Interfaces ('APIs') and/or Software Development Kits ('SDKs').

...
Ingenico [does not] control[] the manner and timing of the merchants' performance of the claimed **method steps** [and] is entitled to **summary judgment of no [divided] infringement.**"

Id. (citations omitted and emphasis added)



DIVIDED INFRINGEMENT: EPO & UPC?



- EPO – concerned only with **validity**
- UPC – concerned with validity and infringement:
 - Art. 25: **direct infringement**
 - Art. 26: **indirect infringement**
- Could the UPC, like U.S. courts, develop a divided infringement doctrine?



RECOMMENDATIONS: CLAIM DRAFTING



- **Methods**

- Avoid including different steps that could be performed by different entities (e.g. by a supplier and its customers)
- Claim any such multi-entity method from the point of view of a single entity
- If must claim different steps that could be performed by different entities, consider whether one entity would necessarily control or direct the other entities' performance of the other steps?

- **Systems**

- Avoid claims that cover a system that could be used by multiple entities
- Claim a component (or components) with a single user within the multi-user system
- If must claim a multi-user system, consider whether one entity would necessarily control the system as a whole and receive the benefit from its use

RECOMMENDATIONS: ACCUSED INFRINGER



Methods

- If accused of infringing a multi-entity method, consider whether one entity controls or directs the other entities' performance of the other steps.
- Does one entity provide **instructions** or **guidance** or **materials** to the other entities regarding their performance of the other steps?
- Does one entity have the **right** or **ability** to **limit** or **stop** the actions of the other entities?

Systems

- If accused of infringing a multi-user system, consider whether one entity **controls** the **system as a whole** and receives the **benefit** from its use (as a whole or every component)
- In both cases, **context matters**: contractual terms, technical support, instructions, ownership of materials or equipment, which entities perform which acts/use which components, etc.



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CONTACT



David Loretto
dlo@aera-ip.com
+ 34 648 149 527
www.aera-ip.com

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