Microsoft ordered to pay $565 million for infringing Eolas & UC's web browser patent?

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Patent Planet

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In 1991 Bill Gates sent a memo to executives at Microsoft:

"I feel certain that some large company will patent some obvious thing related to interface, object orientation, algorithm, application, or other crucial technique. If we assume this company has no need of any of our patents, then they have a 17-year right to take as much of our profits as they want."
Slide 3: In 2003-2004 Gate’s prediction was fulfilled

- WSJ reports Microsoft named in 35 patent suits since 1998
- Microsoft pays $900M to Sun to settle past infringement.
- Microsoft pays $440M to Intertrust to settle digital rights management patent suit.
- Microsoft pays $60 million to SPX to settle patent suit.
- Microsoft pays $35 million to Immersion to settle joy stick patent suit.
- Microsoft ordered to pay $521M to Eolas & UC Regents for patent infringement.

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Slide 4: Why all of the Microsoft patent suits?

- Microsoft reaching into many software areas.
- Microsoft sitting on a mountain of cash - $56 billion pile of cash and short term investments.
In August 2003, jury awards Eolas (one employee) and UC Regents $521 million for patent infringement.

Second largest jury award for a single US patent?
A patent protects a useful, new and non-obvious invention.

The Eolas patent extend web browsers to launch interactive applications.

Example of interactive applications:

- Audio and video streaming (e.g., Macromedia Flash, Apple QuickTime, Real Networks RealOne)
- Adobe’s PDF document reader
- Java implemented through browser plug-ins.
Slide 7: Early development of the invention

A decade ago difficult to remember state of art:

- Web was a large collection of static pages.
- Users were only able to access the information, but couldn’t interact with it.
- Developers were implementing helper applications.
- Mike Doyle and his co-inventors at UCSF are developing software that allows exchange of images such as embryos over the Web with researchers.
Slide 8: Mike Doyle - not the only one working on the problem - Pei-Yuan Wei

- UC undergraduate working in his dorm room.


- In contact with Mike Doyle and aware of his development.

- Key witness for Microsoft testifying to invalidity.
The inventors filed an application with claims defining the scope of the invention with the PTO.

The PTO then assigned application to an examiner who determined whether claims are patentable.

If, after searching the literature, the examiner finds the claims patentable, the PTO grants a patent.

If not, the examiner rejects the application, the applicant can respond to persuade and if successful, the PTO grants a patent.

Process took four years.
United States Patent

Doyle et al.

[54] DISTRIBUTED HYPERMEDIA METHOD FOR AUTOMATICALLY INVOKING EXTERNAL APPLICATION PROVIDING INTERACTION AND DISPLAY OF EMBEDDED OBJECTS WITHIN A HYPERMEDIA DOCUMENT

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[73] Assignee: The Regents of the University of California, Oakland, Calif.

[21] Appl. No.: 324,443


[51] Int. CL 9/44; 9/44; C06F 15/16; C06F 17/30


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[57] ABSTRACT

A system allowing a user of a browser program on a computer connected to an open distributed hypermedia system to access and execute an embedded program object. The program object is embedded into a hypermedia document much like data objects. The user may select the program object from the access. Once selected the program object executes on the user's (client) computer or may execute on a remote server or additional remote computers in a distributed processing arrangement. After launching the program object, the user is able to interact with the object as the invention provides for ongoing interprocess communication between the application object (program) and the browser program. Use application of the embedded program object allows a user to view large and complex multidimensional objects from within the browser's window. The user can manipulate a control panel to change the viewpoint used to view the image. The invention allows a program to execute on a remote server or other computer to calculate the viewing transformations and send frame data to the client computer thus providing the user of the client computer with interactive features and allowing the user to have access to greater computing power than may be available at the user's client computer.

19 Claims, 9 Drawing Sheets

Microfiche Appendix Included (4 Microfiche, 375 Pages)
A patent concludes with claims.

Each claim defines a scope of protection.

Many patent suits focus on claim interpretation.

Tight rope:

If too broad, claim may be infringed but invalid.

If too narrow, claim may be valid but not infringed.
Slide 12: Claim 1

Abbreviated

Executable application is automatically invoked, when an embed text format is parsed by browser, in order to display the object and allow in-place interaction while the web page is being displayed.

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What is claimed is:

1. A method for running an application program in a computer network environment, comprising:

providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;

executing, at said client workstation, a browser application, that parses a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and for responding to predetermined text formats to initiate processing specified by said text formats; utilizing said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable interactive processing of said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window.

February 1999 - Eolas sues Microsoft alleging Internet Explorer infringes.

The patent gives owner right to go to federal court to prevent an infringement, that is the right to exclude others from making, using, selling, or offering to sell the invention.
Slide 14: Who is Eolas?

- It is a spin out of UCSF.
- Three co-inventors initially; today it’s Mike Doyle plus 100 shareholders.
- EOLAS (Embedded Objects Linked Across Systems).
- UC Regents own patent and grant an exclusive license to Eolas.
- UC gets 25% of revenue from patent.
- Eolas gets balance less amount earned by its law firm working on contingency.

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Valid patent

Microsoft should pay for what it has wrongfully taken.
A pivotal event in patent suits today.

Scheduled before trial for court to hear evidence from parties as to claim interpretation.

Judges interpret claims not juries.

If you lose at the Markman hearing, you settle.

Most observers felt Microsoft lost.
Slide 17: Why didn't Microsoft settle and take a license?

- Whether a patent is litigated is not a matter of whether the patent is "strong" or "weak", but is based on law of expected return.

- Expected return = probability of success x total amount of money if successful.

- If value of infringing without paying is worth $521 million even if infringer's probability of success in court is only 10%, it may be well worth it to spend up to $52 million in litigation.
Slide 18: Factors may militate for litigation despite law of expected return

- Microsoft may need to show vigorous litigator to avoid string of nuisance suits.
Microsoft claims Dr. Wei demonstrated technology in May 1993 invalidating the Eolas patent filed in November 1994.

Eolas attorneys need to prove that Dr. Wei hadn't figured it out in 1993.

Eolas attorneys check server of Microsoft expert and learn software was modified after 1993.
Microsoft attorney asks if Dr. Wei can download web page using the early 1990s technology?

Dr. Wei: "Well, I'd have to make an adjustment, and I'm not actually sure, positive, that it would work ... Okay. Now it works. Hey, it works. Great.

Eolas attorney easily shows file displayed not downloaded from Net, but stored on computer in court.

He asks Dr. Wei, “doesn't that show local file down at the bottom?”

Another blow: Dr. Wei admits software modified after 1993.
Slide 21: August 2003 - Judgment day?

Chicago jury holds Microsoft liable for patent infringement and awards Eolas and UC Regents $521 million.
Slide 22: How did the jury come up with $521 million damage award?

- Reasonable royalty - Minimum amount patent owner can be awarded.
- It's the amount the infringer would have paid the patent owner if instead of infringing the patent it had negotiated a license.
- Jury felt 2.5% of sales price of Internet Explorer (IE) was reasonable.
- $1.47 per copy of IE x 354 million infringing copies of IE.
- Eolas unsuccessfully requested $3.50 per copy.
US patents don't extend to activities outside USA

- If making, using, and selling is in Europe, it doesn't infringe US patent.

- An exception: delivering components of the invention from US to foreign country for assembly is infringement.
In making copies of software, companies make an original on a gold master then duplicate it overseas.

Microsoft unsuccessfully argued 60% of its IE sales were duplicated and sold overseas as outside the scope of the patent.

Microsoft also argued that the code was the chemical formula and not the components of the composition - A, B, and C.
Slide 25: Injunction?

- Court order some specified activity is infringement.
- Infringer must refrain from that activity or face contempt of court.
- Injunction stayed until appeal decided.
- Considered most powerful remedy.
Microsoft states plans for design around Eolas patent.

Microsoft publishes plan to modify web browser to design around Eolas patent.

Microsoft proposes to launch a dialog box if user clicks on a link to an interactive application to avoid claim limitation of automatically invoking an executable application.

If developers choose to not implement Microsoft’s design around, visitors see a warning pop up stating so before launching plug-in.

Microsoft orchestrating public outcry?

Prompts public outcry.

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In October 2003, Microsoft attorneys, Adobe, Macromedia, and W3C with Tim Berners-Lee file papers citing prior literature to PTO.

Tim Berners-Lee writes a letter to PTO Microsoft's design around will ruin the Web.

No one “requested reexamination.”

They had something else in mind – Commissioner-ordered reexamination.
Anyone can request reexamination of a patent in PTO.

If the request presents "a substantial new question of patentability," the PTO orders reexamination.
Oct 2003 - Commissioner of PTO orders reexamination of the patent.

Commissioner must have compelling reason such as unpatentable on its face or public outcry to order reexamination.

Very very rare - only 2% of all 6,800 reexamination or 157 times.

350,000 applications filed last year in PTO
Slide 30: Commissioner-ordered reexamination is quite effective

- 87% of patent owners forced to cancel or amend claims.
- The amended claims may be no longer infringed or intervening rights.
Isn’t this Commissioner-ordered reexamination meddling with the court system?

- Eolas case hotly contested over four years.
- After spending millions in legal fees Microsoft was unable to establish the Eolas patent was invalid.
- If Microsoft is correct, couldn't it just explain its position on appeal and get the case reversed?
June 9, 2004 - Microsoft filed a 174-page appeal "brief" asking Federal Circuit to overturn the judgment.

July 16, 2004 - Eolas and UC will file reply brief.

Microsoft now liable for $565 million due to interest on judgment.

Damages will continue to increase due to interest.

Damages will also increase due to an accounting for all infringing sales after judgment.

Injunction is stayed until appeal decided.
Slide 33: Status in PTO

- PTO will decide if patent is valid.
- If Eolas patent upheld as valid, a settlement more likely.
- If Eolas patent held invalid, Eolas and UC and their law firm would appeal.
- If appeal is unsuccessful, Eolas and UC walk away with nothing after years of fighting.
“In November 22, 2002 (before trial) Mike Doyle noted, "It amazes me that everyone just assumes that MS will be able to merely write a check and make the whole thing go away."
Slide 35: Is Mike Doyle feeling the power of patents as property?

"Considering the facts in the case and the magnitude of the stakes here, a highly likely outcome a jury will award us both damages and an injunction the power to exclude.

What if we were to just say no?

Or, what if some other big player were to acquire or merge with us?"
"One possible scenario is that Eolas would have the power necessary to re-establish the browser-as-application-platform as a viable competitor to Windows."

“The Web-OS concept, where the browser is the interface to all interactive apps on the client side, was always a killer idea. It still is.

It lost momentum not because it wasn't economically or technically feasible, but because MS made it unlikely for anybody but them to make money on the Web-client side.”
Slide 37: Reinvigorating the software industry?

- “Just think of how we could use this patent to re-invigorate and expand the competitive landscape in this recently-moribund industry.

- What if we could do what the DOJ couldn't, and in the process make Eolas and everybody else, possibly excluding MS, richer?

- Wouldn't Eolas stand to profit more … Wouldn't everybody else?”