# COMPUTERS & LAW

Journal for the Australian and New Zealand Societies for Computers and the Law

Editors: Lesley Sutton and Belinda Justice
Number: 48

ISSN 08117225
June 2002


## British Telecom lays claim to hyperlinking


*Glen Sauer*

Glen Sauer is a solicitor in the Technology Group of Blake Dawson Waldron.


Hyperlinking is the means by which Internet users can jump from one Web page to another, simply by clicking on a highlighted text or picture. Basically, hyperlinking embeds a bit of code invisibly on a Web page, allowing people to move easily from one Web page to another by a click of a mouse.

Because hyperlinking is so integral to the operation of the World Wide Web, British Telecom ("**BT**") has raised eyebrows in Internet and legal circles by asserting patent rights for the technology behind hyperlinking. While a recent Court decision on the construction of the patent's claims arguably weakens BT's claim, the final result is by no means certain.

### The Hidden Page Patent

BT's US patent, No. 4,873,662 entitled "Information handling system and terminal apparatus therefor" was filed in the United States in 1977 claiming priority from a United Kingdom application filed in 1976. The patent was not granted until 1989. The patent expires in October 2006.

BT claims that although it has had the patent for at least the last 12 years, the patent had gone "missing in action" and BT only became aware of it again in 2000 after a global inventory of the 15,000 patents in its portfolio.

The invention claimed in the patent, which BT calls its "Hidden Page" patent, was part of a technology called "Prestel" developed by BT to allow communication between networked computers at the British post office. Essentially the Hidden Page patent claims a system that enables text sent via telephone lines from one central

*Continues page 3*

***In this issue:***

*Continued from page 1*

computer to another terminal. The text can include non-visible data such as programming code. Hidden Page patents filed in Europe have already expired. No Hidden Page patent was filed in Australia.

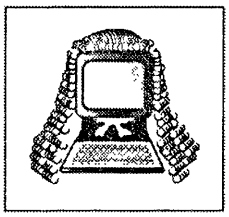
## The legal proceedings brought by BT

BT failed to convince 17 United States Internet Service Providers ("**ISPs**") to purchase licenses from BT, which would permit their customers to use hyperlinks. Accordingly, on 13 December 2001 BT filed a lawsuit against the Internet Service Provider ("**ISP**") Prodigy Communications Corporation ("**Prodigy**") in the Federal Court in New York asserting patent infringement by the use of hyperlinking. The action has been set down for hearing in New York on 9 September 2002.

BT alleges that by maintaining "a web server which stores plural blocks of information, i.e. web pages, at locations of a storage medium such as a disk" and by including in such web pages both "a displayed portion" and "an undisplayed portion with hidden information that is not seen by the user" which includes "addresses associated with the displayed portion", Prodigy is infringing the Hidden Page patent. BT claims that by using, selling and/or offering for sale its Internet services" Prodigy has induced infringement of, and will continue to induce infringement of the Hidden Page patent. Prodigy denies infringement and has counter claimed seeking revocation of the Hidden Page patent.

BT has chosen to sue only Prodigy for tactical reasons. In the United States Federal Court, which hears all patent appeals in the United States, there is a rebuttable presumption of "laches", which defeats a patent infringement claim which arises more than six years after a patentee knew or should have known of an infringement of their patent. In January 1995 Prodigy became the first ISP in the United States to offer World Wide Web access. This falls within the six year period and a laches argument probably cannot be sustained. Because Prodigy was the first ISP in the United States, no other ISP in the United States could argue laches. Accordingly BT's suit against Prodigy is a test case. If successful, BT is expected to attempt to collect royalties for the use of hyperlink technologies from other ISPs and other entities in the United States.

It should be noted that the activity described in the BT complaint is broad enough to cover the activities of ISPs, Web hosting companies, and even entities and individuals that publish or maintain Web sites.

***COMPUTERS & LAW***

**Editors**

**Lesley Sutton**
C/- Freehills
Level 32, 19 – 29
MLC Centre, Martin Place
Sydney NSW 2000
Australia
(DX 361 Sydney)
www.freehills.com.au
Tel: +61 2 9225 5169
Fax: +61 2 9322 4000
Email: Lesley_Sutton@freehills.com.au

**Belinda Justice**
C/- Freehills
Level 32, 19 – 29
MLC Centre, Martin Place
Sydney NSW 2000
Australia
(DX 361 Sydney)
www.freehills.com.au
Tel: +61 2 9225 5708
Fax: +61 2 9322 4000
Email: Belinda_Justice@freehills.com.au

Australian Subscription: $32.00* per 4 issues

Overseas Subscription: $44.00 per 4 issues

Advertisements: $300.00* for half page advertisement within the Journal.

Further information on rates will be provided by the Editors on request.

Articles, news items, books for review and other items of interest may be sent to the Editors.

**Please see back cover for GST details.*

## The preliminary hearing

During a preliminary hearing in the case in early February this year[1], McMahon J voiced numerous doubts over BT's claim for infringement. Her Honour stated that BT had a difficult case to prove that a patent filed in 1976, over a decade before the creation of the World Wide Web, could apply to the use of hyperlinks on the Internet.

McMahon J also queried whether BT's patent can legitimately be said to apply to the Internet, since the patent specifies the use of a sole computer terminal. In her ruling Judge McMahon noted:

> "In this patent, the computer is a single device, in one location. The term 'computer' is the only structure described in the specification, and there is no indication that . . . the term 'computer' means to be broader than 'a computer'. If the term 'computer' does not tell us what the computer is, then the claim would be indefinite."

From this statement it appears that McMahon J is of the preliminary view that because hyperlinks commonly provide links between different Web pages stored on different computers (Web servers), if BT's patent is said to apply to only a single computer, it appears unlikely that the patent could apply to Internet hyperlinking.

## Infringement

Alleged infringement of a patent in the United States is generally dealt with in two stages. First, the Court will construe the claim as a matter of law, and second, the issues of validity and infringement will be determined as a matter of fact. The preliminary hearing dealt with the former, and the trial will deal with the latter. At trial Prodigy is likely to assert that there has been no infringement.

For example, claim 1 of the BT patent (paraphrased) claims:

> "A digital information storage, retrieval and display system comprising:
>
> - a central computer means . . .
> - plural remote terminals means . . .
> - central computer means of interacting with remote terminals"

The problem with the claim of infringement is that the integers in the claims of the patent do not correspond well with modern day technology. This problem is highlighted in McMahon J's preliminary finding that the Hidden Page patent covers a system with a single central computer in one location, containing a centralised information database, connected to a number of remote terminals. The Web is not arranged in this way. Rather, the Web comprises numerous Web servers holding data, connected to each other and to Web browsers via the Internet. Prodigy may be able to successfully argue that what happens on the Web does not infringe the Hidden Page patent.

Another issue detrimental to BT's chances of success is that it is questionable whether Prodigy, or any individual for that matter, can be held to be an infringer or contributory infringer. This is because while BT asserts that one or more claims of the patent correspond to the entire Internet, different parties play different roles on the Internet. While an ISP operates a "digital information system" (along with publishers of various web sites), it is the ISP's customers via their personal computers who operate the "plural remote terminal means" (assuming that personal computers and other Web enabled devices correspond with this integer).

## Validity

A claimed invention will lack novelty in the United States if before the patentee's invention date, the subject matter was invented by someone else[2]. Prodigy may also be able to successfully assert that there are a number of possible examples of "prior art" evidencing that the invention as claimed existed before 1976, and thus was invented by someone else.

As early as 1945, Vannever Bush in his article "As We May Think"[3] outlined his concept of "associative indexing" by which:

> "any item may be caused at will to select immediately and automatically another. This is the essential feature of the memex. The process of tying two items together is the important thing."

While Bush's associative indexing was essentially a method of organising and accessing documents on a glorified microfiche machine or "memex", the similarities to hyperlinking via the Internet are obvious.

In 1960 Bob Bemer coded the critical concept of the "escape sequence" used in hyperlinks. The escape sequence invented by Bemer is a command, which instructs a computer to make a shift in its processing, allowing a user to move through files, programs or networks. The escape sequence appears in every hyperlink as a slash("/"), a programming command that allows Internet users to move from computer system to computer system, or from web page to web page in a web site, simply by clicking on a hyperlink.

In 1968 Douglas Engelbart gave a demonstration at the Stanford Research Institute of an "oN Line System" or "NLS" which, amongst other things, debuted the computer mouse, hypertext, object addressing and dynamic file linking as well as shared screen collaboration involving two persons at different sites communicating over a network with audio and video interface. The Stanford Research Institutes' Web site[4] notes that Engelbart demonstrated the capability of NLS to:

> "jump between levels in the architecture of a text, making cross references, creating internal linking and live hyperlinks within a file. Links can be made visible or invisible."

Ted Nelson worked on the Xanadu hypertext project[5] for IBM in the 1960's and 70's. In 1968 Nelson stated that:

> "Any text structures may be interconnected [linked] in arbitrary ways, and the user may jump along connections in this linkage structure."

An invention will lack an inventive step under US law if it can be proved that an artisan of ordinary skill in the

relevant art (in this case computer programming) would be able to make the transition from the prior art (for instance the Bush, Berner, Engelbart and Nelson publications) to the invention claimed by simply ordinary efforts. While critics of the BT patent argue that the invention claimed in the BT patent is merely an obvious variation on the earlier ideas of Bush, Berner, Engelbart, Nelson and others, Prodigy must overcome a number of evidentiary hurdles in order to invalidate the BT patent on the grounds of obviousness. An issued patent is legally presumed to be valid. The United States' courts interpret this to mean that an infringer such as Prodigy must establish its case by "clear and convincing" evidence.

## Consequences of BT Success

It is unclear what the result of a successful claim by BT would be. While BT is obviously interested in getting licence fees from ISPs and others who use hyperlinking, Wired.com notes that programmers believe that it would be relatively easy to code a completely new method of linking Web pages[6]. This kind of work-around may mean that ISPs and others would not need to license BT's technologies. The economic consequences of a decision favourable to BT would depend on the cost of implementation of such a work-around.

## The importance to organisations of regularly reviewing intellectual property rights

This litigation highlights that while it is important for innovators to secure protection for their inventions through patents or other intellectual property rights, the management of such rights is of equal importance. Like any asset, patents should be used in a strategic way. It is necessary for organisations to maintain a culture of knowledge and understanding of intellectual property rights within the organisation, which extends to all levels of the organisation including senior management. Simply having a register of one's intellectual property rights may not be sufficient. It is important to regularly review such a register and ensure that any intellectual property rights are used to their full potential and do not go "missing in action".

* The author, while gratefully acknowledging the guidance and comments received from Ben Miller, Senior Associate, Technology Group, Blake Dawson Waldron, accepts full responsibility for any errors.

1 British Telecommunications PLC v Prodigy Communications Corporation, 00Civ. 9451 (CM), Opinion and Order following preliminary hearing, McMahon J, 13 March 2002.

2 Title 35, United States Code, section 102(2).

3 http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm.

4 http://sloan.stanford.edu/MouseSite/1968Demo.htm.

5 Its history is documented in www.xanadu.net.

6 www.wired.com/news/business/0,1367,50361,00.html

# Electronic Signatures (UK)

UK Law Development: The Electronic Signature Regulations 2002 came into force on 8 March. They implement provisions of Electronic Signatures Directive (1999/93/EC) which relate to the supervision of certification-service-providers, their liability in certain circumstances and data protection requirements concerning them. Provisions in the Directive relating to the admissibility of electronic signatures as evidence in legal proceedings were implemented by s7 of the Electronic Communications Act 2000.

*(This article was supplied courtesy of Linklaters and Alliance, Intellectual Property News, Issue 21, March 2002.)*