EIP

All in the American mind? US and UK take different approaches to assessing mental act exclusions

In a recent EIP newsflash we reported a recent development in the way the UK Intellectual Property Office handles subject matter excluded from patentability, based on a High Court judgement relating to Halliburton's Patent Applications [2011] EWHC 2508 (Pat) (5 October 2011).

Interestingly, recent decisions in the US seem to indicate a different approach to assessing the scope of exclusion from patentability of inventions comprising so-called 'mental acts'. Here we assess how some recent US judgments compare with the UK position.

UK – narrow interpretation of 'mental acts' exclusion

In Halliburton, the High Court determined that computer implemented inventions are indeed patentable if they perform a function that is patentable, and that the mental act exclusion has a narrow scope i.e. acts that are computer implemented would not fall under the mental act exclusion even if they could be performed mentally.

HHJ Birss QC held that "the balance of authority in England is in favour of the narrow approach". Despite the claim not explicitly being limited to an implementation on a computer, the judge found that it would be clear to any skilled reader that this was the case, stating, "...the correct scope of the mental act exclusion is a narrow one. Its

purpose is to make sure that patent claims cannot be performed by purely mental means and that is all".

p2

US – broad interpretation?

In the US, a different interpretation seems to dominate. A recent decision of the US Court of Appeals for the Federal Circuit in CyberSource Corp. v. Retail Decisions, Inc., is one example. CyberSource is the owner, by assignment, of a patent that claims a "method and system for detecting fraud in a credit card transaction between a consumer and a merchant over the internet". The method involves using internet address information (e.g. IP addresses, MAC addresses etc.) to determine whether an internet address relating to a particular transaction "is consistent with other internet addresses that have been used in transactions utilising the same credit card".

The claims at issue related to the method itself, and to a computer-readable medium containing program instructions for executing the method (a so-called 'Beauregard' claim). The Court held that the method claim "simply requires one to obtain and compare intangible data pertinent to business risks", and as such "can be performed in the human mind, or by a human using a pen and paper... does not limit its scope to any particular fraud detection algorithm, and no algorithms are disclosed... rather, the broad scope of [the] claim extends to essentially any method of detecting credit card fraud based on information relating past transactions to a particular "Internet address", even methods that can be performed in the human mind".

The Court considered that "methods which can be performed entirely in the human mind are unpatentable... because computational methods which can be performed entirely in the human mind are the types of methods that embody the "basic tools of scientific and technological work" that are free to all men and reserved exclusively to none".

Regarding the 'Beauregard' claim, CyberSource argued that this claim should be patentable, since the mental process of the method is coupled with a "manufacture or machine". However, the Court looked to the "underlying invention" and held that regardless of whether the claim was tied to a computer or not, the underlying invention is a "method of detecting credit card fraud, not a manufacture for storing computer-readable information". The Court affirmed the position in previous cases (see e.g. Alappat, 33 F.3d 1526, 1545 (Fed. Cir. 1994)), stating that "programming a general purpose computer to perform an algorithm 'creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions...'" but goes on to clarify that "we have never suggested

that simply reciting the use of a computer to execute an algorithm that can be performed entirely in the human mind falls within [this] rule". Expanding on this the Court explained
p3 that in order for a process that is linked to a machine to be patentable solely on the basis of the link, the machine "must impose meaningful limits on the claim's scope... in other words, the machine must play a significant part in permitting the claimed method to be performed".

The Board of Patent Appeals and Interferences (BPAI) has affirmed the CyberSource decision with a rejection of an IBM application (see Ex Parte Vilalta, 2011 WL 6012377 (BPAI November 29, 2011)) that claims a "computer-implemented method for partitioning a domain dataset". Despite limiting the claim to a computer-implemented method, the BPAI held that the method is unpatentable because it "could be performed by a human writing on a piece of paper". The Board quoted CyberSource stating that, "a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under S.101".

Incidentally, IBM had also included claims directed to a "system for partitioning" that recited conventional hardware (e.g., 'a memory' and 'a processor')". Following CyberSource, the BPAI looked to "the underlying invention for patent-eligibility purposes". In doing so, the Court considered the hardware limitations to be "nominal recitations of conventional hardware", and concluded that the invention lay in the method, and that the system, and Beauregard, claims were merely reformulated versions of the method and should be assessed accordingly. Consequently the Court concluded that "the scope of the recited functions covers functions that can be performed in the human mind, or by a human using a pen and paper" and that "unpatentable mental processes fall within the subject matter of [the] independent claims".

These US judgments contrast with the judgment in Halliburton. By concluding that any method that can be performed in the human mind is unpatentable despite an expressed limitation to implementation on a computer, the US Courts appear to be adopting the view that mental acts should be interpreted broadly, rather than narrowly. At a time when in the UK, following Halliburton, patentees and their attorneys might expect more favourable attitudes to computer-implemented inventions, it seems that in the US the opposite may be true.