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Patentability of computer programs - High Court judgment gives rise to useful examples of a “technical effect”

(HTC Europe Co Ltd v Apple Inc [2012] EWHC 1789).

A further decision in the so-called “smartphone wars” was issued by the High Court recently in relation to a patent dispute between HTC Europe Co Ltd (‘HTC’) and Apple Inc (‘Apple’). In total, four of Apple’s patents were at issue relating to various aspects of smartphone technology.

The litigation began with HTC seeking revocation of three patents in Apple’s portfolio dating from between 2005 and 2008. In response, Apple sued HTC for infringement of those patents, and also a fourth patent dating from 1994. Finally, HTC counterclaimed to seek revocation of that fourth patent. This case dealt with the validity and alleged infringement of all four patents.

The case resulted in success for HTC, with the claims of all four patents being declared either invalid or not infringed (or both). The case also illuminated the UK’s elusive computer program exclusion. In the UK, the distinction between patentable and excluded subject matter for computer programs is widely considered to be an intangible line. In this case, the Judge gave us four examples of where the line may lie.

The Patents Act specifically identifies computer programs as a type of subject matter for which patents should not be awarded. This makes some doubtful of the possibility of securing patent protection in this area. However, the restriction only applies to the extent that an invention falls solely within one of the predefined exclusions. Indeed, despite all

four of the patents discussed in this case relating to mobile telephone software, only one was considered invalid for being a computer program “as such”.

The first patent related to running multiple applications on a device with a “multi-touch” display (i.e. one capable of registering more than one simultaneous touch input). The claimed invention involved operating system functionality that allowed an application to be declared as ‘single-touch-capable’ only. This was useful for legacy applications. For such applications the operating system would only pass information indicative of single touch inputs, such that an application developer was not responsible for handling multiple concurrent touch events. Despite being advantageous, and clearly attractive to developers, the Judge considered that the ease of writing computer programs cannot be a relevant technical effect. Here, the contribution was considered to be merely a redistribution of the labour of writing software, and hence the invention was not considered to be patentable.

Given the decision on the first patent, it may be asked what kind of contribution can carry an invention across the line into patentability? In the case, the Judge looked for several indicators that had been set out in UK case law. These include whether the invention has an effect outside of the computer, makes the computer operate in a new way, makes the computer operate more reliably or faster, and whether a problem was truly solved rather than merely circumvented. The remaining three patents in suit managed to overcome this hurdle.

The second patent was one of Apple’s divisive “slide to unlock” patents. The claimed invention related to a method of unlocking a device by moving an unlock image along a predefined path on a touch screen display. The Judge here not only considered the computer program exclusion, but also the presentation of information exclusion. The only novel contribution over the prior art was determined to be that the Apple implementation provided a moving graphical user interface object that gave the user feedback as to their progress through the required sliding gesture. However, when considering excluded subject matter, the Judge pointed out that the contribution of the whole invention should be considered, and not merely the single novel feature. The contribution of the invention was to provide an improved form of switch on a touch screen device, and thereby provided a technical effect outside of the computer.

The third patent related to browsing a sequence of images on a touch screen device. The claimed invention related to using swiping gestures to navigate around a zoomed image. When performing a first swiping gesture on a zoomed image, an edge of the image appeared on screen as a black bar. If the user released a finger from the touchscreen, the image sprung back to be flush with the edge of the screen. After a second swiping

gesture in the same direction, the image transitioned to the next image in the sequence. HTC contended that the contribution of the invention was no more than the presentation of information and/or a computer program as such. However, the Judge held that a novel method of manipulating a zoomed image, with different gestures having different effects, successfully traverses the line into patentable subject matter.

The fourth patent was more than ten years older than the previous three. It related to providing a telephone handset capable of supporting SMS text entry in multiple alphabets. In the claimed invention, the various alphabets are stored in separate locations in memory, and do not share common letters (i.e. each new alphabet is self contained, and not merely an extension of a previous alphabet). The closest prior art to the claimed invention was found to be a handset supporting multiple language selection, but not capable of SMS. Despite this difference being considered obvious, for the purposes of excluded subject matter, the contribution of the invention included aspects of the SMS messaging capability. This was held to produce an effect outside of the computer and was enough to take the invention outside of the computer program exclusion.

As a result of the Judge's analysis in this case, we now have several concrete examples that help define where the line on patentability for computer programs lies. The situation may change if the case is appealed, but at the present moment the software in your pocket may be more patentable than many believe.

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