Some fundamental principles surrounding computer-implemented inventions (CIIs) have always seemed to remain the same. In the UK and Europe a strictly enforced line has been followed that means it is very difficult to obtain a patent for software. In contrast, the threshold in the US was much lower. The approach of patent offices and courts in the rest of the world seemed to lie somewhere between the US and Europe/UK positions.

There have been some changes in the US that seem to put it much closer to the positions in the UK and Europe. Conversely, some recent decisions by the UK Intellectual Property Office (IPO), covered below, have reminded everyone that software is most certainly patentable in these jurisdictions, despite widely held beliefs to the contrary.

Early developments

The European Patent Office (EPO) used to adopt the “contribution” approach, which stems from the Vicom decision back in 1984, relating to image processing. Vicom established that when considering whether a patent application’s subject constituted an invention, and therefore did not comprise excluded subject matter, it was necessary to consider what technical contribution the subject matter made to the art when claimed as a whole. If there was a technical contribution the subject matter was not excluded and assessments of novelty and inventive step would then follow.

The UK courts quickly followed. In a series of different cases that passed to the English Court of Appeal, the contribution approach was firmly enshrined in UK law, where it remains to this day. Some recent cases have more prescriptively codified what is meant by a “contribution” and how one goes about testing for it, but the position is essentially the same as it was when Vicom was first adopted into UK jurisprudence.

The EPO, benefiting from its more flexible principles of precedent, decided after a few years that the theory and reasoning behind Vicom were flawed. How could it be, subsequent boards of appeal asked, that the determination of whether an invention is excluded subject matter is made with reference to a “contribution”? A contribution is something that can only be measured against the existing art, so working out what it is must entail assessing what differences there are between the invention and the prior art. This, the EPO argued, is the domain of novelty and inventive step. The contribution approach wrongly conflates these supposedly independent legal tests.

The EPO stopped using the contribution approach, adopting through a series of decisions by the boards of appeal an approach that the “any hardware” approach, with a qualification. The “any hardware” requirement means that as long as a claim involves the use of hardware, then it is considered to be technical subject matter.

The qualification limits this seemingly free approach to the question. It specifies that when considering inventive step, it is only
“THE EPO AND IPO ANALYSIS WILL ALMOST ALWAYS PRODUCE THE SAME END RESULT FOR THE SAME INVENTION, EVEN THOUGH THE ROUTES TO THE DECISIONS WILL BE QUITE DIFFERENT.”

An October 2014 decision by the IPO’s hearing officer (admittedly only first instance and not strictly binding on the agency), which went in favour of Toshiba Research Limited, found that an invention relating to language processing was patentable. Claim one, after amendment, was directed to “a method of speech processing … comprising training a language model using selected bag of word pairs … and processing speech using the model”.

The patentee successfully argued that the claimed invention was a better way of speech processing and therefore, since image processing is patentable (as per Vicom), speech processing is also patentable.

Another recent (November 2014) UK case, Lantana v Comptroller, found its way to the Court of Appeal. The ‘invention’ related to a process by which a document could be automatically emailed to a user from a remote machine, so long as the remote machine had on it a piece of proprietary software with which a user could interact. The IPO and the court both found the invention lacking in technical contribution.

The new law expressly excludes from patentability anything considered too “abstract”. While this is different from the technical requirement of the original EPO and current UK positions, it does mean that the US practice is more closely aligned with the UK’s and EPO’s than ever before. Within the lengthy Supreme Court judgment there are numerous statements and indications that could almost have been written by a judge in the English Court of Appeal or by an EPO board of appeal member.

Applicants pursuing applications in the area of CIs are experiencing this very directly. Recent practice directions from the US Patent and Trademark Office (USPTO), supposed to provide some clear direction and understanding on this subject, have not really done so. Many feel they are circuitous and unhelpful at best. The caseload of the USPTO appeal boards is building as more and more applicants find no success before examiners and resort to the slow but (relatively) low-cost USPTO appeal procedure.

The landscape is shifting. The US position seems somewhat less patentee-friendly than it did a few months or years ago, whereas some recent decisions in the UK seem to have gone, positively, the other way.

The overall advice remains the same, which is that whereas some inventions, no matter what you do with them in the patent specification, will struggle for legal approval in some jurisdictions, with appropriate drafting and argument, there is some hope of success. Innovators and their attorneys in these areas should bear these points in mind.

the technical features that can contribute. In other words, anything within a claim that is not technical will not form a part of the inventive step analysis. This in practice takes away with the hand of inventive step what had seemingly been given with the hand of excluded subject matter.

For example, if your invention is a pure business method implemented on a computer, the invention will avoid falling foul of the excluded subject matter test because of the use of the (technical) computer. However, the only features of the claim that will be considered for assessing inventive step will be the (old and well known) computer. The claim will therefore fail on inventive step.

End result
In practice, the EPO and IPO analysis will almost always produce the same end result for the same invention, even though the routes to the decisions will be quite different.