



## Applying the Aerotel/Macrossan test

The Court of Appeal's recent judgment in the matters of Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application [2006] EWCA Civ 1371 ("Aerotel/Macrossan") PDF document(236Kb) proposed a new test for assessing whether inventions relate to patentable subject matter. This paper gives some examples of how the Patent Office sees the test being applied in practice. The examples chosen are patent applications that were refused by hearing officers earlier this year using the old tests. In every case the new test appears to come to the same conclusion, thus confirming the Court's view that the new test is consistent with previous decisions of the Court.

### Case 1: Agilent Technologies Inc BL O/141/06

This application relates to monitoring a telephone signalling network. It allows the user to look at a variety of different pieces of information relating to both voice messages and data transmission.

### Case 2: Arm Limited BL O/066/06

This application concerns an optimized compiler of application code in a data processing apparatus which responds to input signals derived from a non-invasive trace unit coupled to the processing apparatus to continuously modify the compilation process.

### Case 3: Touch Clarity Limited BL O/198/06

This application concerns a system which takes an action based on an assessment of a number of possible actions. The system can be one of a wide range of possibilities – highlighted examples are a greetings card website where the customer is presented with a number of choices based on previous selections, and control of a robot vacuum cleaner. Independent claims 1 and 15 claim the system and method in full generality; independent claims 20 and 32 are the system and method restricted to a robotic operating system.

## Case 4: Robert B Franks' Application BL O/153/06

This application relates to a networked system for administering the renewal of intellectual property rights such as patents and trade marks whereby a member of the public receives a renewal quotation over the internet and orders and pays for the renewal if he so wishes.

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## Case 1: Agilent Technologies Inc BL O/141/06

This application relates to monitoring a telephone signalling network. It allows the user to look at a variety of different pieces of information relating to both voice messages and data transmission.

### Applying the test in *Macrossan/Aerotel*

#### 1. Construe the claim:

Claim 1 is straightforward and requires no further interpretation, covering the system as described above.

#### 2. Identify the actual contribution:

The applicant identified this as the facility to be able to choose which types of record you want to look at and which functions you want to carry out on those records. This seems a correct assessment of the contribution (and was agreed by the original hearing officer).

#### 3. Ask whether it falls solely within the excluded subject matter:

The contribution as determined above appears to be nothing beyond a better, more flexible computer program processing data - as was noted by the original hearing officer. Selecting records & functions are simply computer program features. This therefore appears to be solely a computer program.

If the obiter comments in *Fujitsu* on mental act are followed, then this invention would also be excluded as a mental act. However, if the obiter *Macrossan* comments are followed, it would not be.

#### 4. Check whether the actual or alleged contribution is actually technical in nature:

Having already determined the contribution purely within the excluded area, this check seems redundant.

### Conclusion

This application would be refused under section 1(2) as being a program for a computer program, as found by the hearing officer.

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## Case 2: Arm Limited BL O/066/06

This application concerns an optimized compiler of application code in a data processing apparatus which responds to input signals derived from a non-invasive trace unit coupled to the processing apparatus to continuously modify the compilation process.

### Applying the four-step test from *Macrossan/Aerotel*

#### 1. Construe the Claim:

The paragraph above gives a fair summary of the invention defined in the claims.

#### 2. Identify the actual contribution:

What the inventor has added to the stock of human knowledge is not the trace unit used to monitor the compilation process because that is conventional. The contribution made by the invention is the use of data from a non-invasive trace unit to adapt compilation of application code, depending on the characteristics of the particular processor, in an iterative manner

#### 3. Ask whether it falls solely within the excluded field:

Whilst aspects of the invention are implemented in software, the overall contribution is not solely a program for a computer and so does not fall solely within excluded subject matter.

#### 4. Check whether the actual or alleged contribution is actually technical in nature:

The contribution affects the technical operation of the computer and so passes the fourth test.

Thus the invention would appear to be patentable under the new test. The hearing officer reached the same conclusion.

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## Case 3: Touch Clarity Limited BL O/198/06

This application concerns a system which takes an action based on an assessment of a number of possible actions. The system can be one of a wide range of possibilities - highlighted examples are a greetings card website where the customer is presented with a number of choices based on previous selections, and control of a robot vacuum cleaner. Independent claims 1 and 15 claim the system and method in full generality;

independent claims 20 and 32 are the system and method restricted to a robotic operating system.

## Applying the four-step test from Macrossan/Aerotel

### 1. Construe the Claim:

The system claims 1 and 20 are somewhat obscure as they contain a mixture of system features and method features. However, they are clearly intended to correspond to the method claims 15 and 32 which are clearer. The system claimed is as described above.

The claimed invention covers previously known monitoring and store means, together with a known assessing means used to run a new algorithm.

### 2. Identify the actual contribution:

The difference between the prior art and claims 1 and 15 is that the known assessing means uses the new algorithm to determine the best next action for the "operating system" (which encompasses a number of possibilities as noted above). Therefore the contribution in these claims is a better way of determining what next action would be the best for this "operating system" to take. Alternatively, the contribution can be seen as a computer program which better determines the next best action.

Claims 20 and 32 are further restricted by the requirement that the operating system is a "robotic operating system". The contribution in these claims is therefore a better way of determining what next action a robot should perform. Again, alternatively, it can be seen as a computer program which better determines a robot's next action.

### 3. Ask whether it falls solely within the excluded field:

For claims 1 and 15, there is nothing beyond the determination of a "next action" as the operating system is unrestricted. This determination is solely mathematical method and thus falls squarely within that exclusion. The determination as implemented on a computer program also falls squarely within that exclusion. Therefore the contribution in these claims lies wholly within excluded fields.

For claims 20 and 32 there is the additional limitation of the next action being performed by a robot. The controlling of a robot lies outside the scope of mathematical method or computer program and therefore the contribution in these claims is not solely within excluded fields.

### 4. Check whether the actual or alleged contribution is actually technical in nature:

For claims 1 and 15, the previous step has already determined that the claimed invention is excluded; this check does not seem to add anything.

In claims 20 and 32, there is a contribution which is technical in nature in that we have a robot being controlled.

## Conclusion

Claims 1 and 15 are excluded from patentability by section 1(2) while claims 20 and 32 are not so excluded.

This is the same conclusion as reached by the original hearing officer, and follows the same basic reasoning as used by the hearing officer re the CFPH test (in a slightly different order), but without the need to consider the range of arguments raised by the agent attacking it from different angles based on other case law.

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## Case 4: Robert B Franks' Application BL O/153/06

This application relates to a networked system for administering the renewal of intellectual property rights such as patents and trade marks whereby a member of the public receives a renewal quotation over the internet and orders and pays for the renewal if he so wishes.

### Applying the test in *Macrossan/Aerotel*

#### 1. Construe the claim:

The above paragraph gives a reasonable summary of the invention defined in the claims.

#### 2. Identify the actual contribution:

The contribution made by the invention is a semi-automatic system for helping users manage the renewal of intellectual property rights by calculating the cost of renewing particular IP rights in various jurisdictions and effecting the renewal as the user sees fit. Alternatively, and given that the specification acknowledges that the hardware employed to implement the invention is conventional, the contribution is a computer program for managing such rights.

#### 3. Ask whether it falls solely within the excluded subject matter:

The process of renewing IP rights is essentially a business activity and so the contribution falls squarely within the method of doing business category. As it is implemented in software it also falls within the computer program category. There is nothing in the contribution that falls outside these excluded categories.

#### 4. Check whether the actual or alleged contribution is actually technical in nature:

This step is redundant having found it to fall solely within the categories of excluded matter in step 3.

## Conclusion

The invention is excluded from patentability by section 1(2). The Hearing Officer reached the same conclusion by applying the CFPH and technical contribution tests albeit under some different categories. In particular he found it unpatentable as a computer program but concluded it was not a method for doing business following the interpretation given to that category by Mann J in *Macrossan*. That interpretation, of course, has now been overturned by the Court of Appeal.

The Hearing Officer also found that it was excluded as a mental act. That would also be true under the *Aerotel/Macrossan* approach if the obiter comments in *Fujitsu* are followed, but not if the obiter comments in *Aerotel/Macrossan* are followed.