

## PATENTS ACT 1977

IN THE MATTER OF references under sections 8 and 12 by the Secretary of State for Defence in respect of the pattern recognition correlator shown in the specification of GB patent application 2317487, and opposition thereto by the patent applicants, Rupert Charles David Young and Chris Reginald Chatwin

### FINAL ORDER

- 1 On 12 February 2001 I issued a decision on the above references. In that decision I made certain findings, and then invited the parties to attempt to agree between them a form of order that would meet their needs and be consistent with those findings. I am very grateful to the parties that they have indeed agreed a draft order that I am happy to adopt. Before doing so, however, I must just deal with three points.
- 2 First, the requested order includes allowing the claimant to file a new patent application under section 8(3) for that part of the subject matter of GB 2317487 that I have found belongs to him. The relevant parts of section 8(3) read:

*“Where a question is referred to the comptroller under subsection 1(a) above and-*

  - (a) . . . . .
  - (b) . . . . .
  - (c) *any such [patent] application is refused under any other provision of this Act or is withdrawn before the comptroller has disposed of the reference, but after the publication of the application;*

*the comptroller may order that any person by whom the reference was made may within the prescribed period make a new application for a patent for the whole or part of any matter comprised in the earlier application . . . subject . . . to section 76 below, and . . . that, if such a new application is made, it shall be treated as having been filed on the date of filing the earlier application.”*
- 3 The application in suit, GB 2317487, has been refused, no response having been filed to the examiner’s outstanding objections within the time specified or, indeed, within the period prescribed by rule 34 of the Patents Rules 1995, and I have, of course, found that some of the subject matter in that application belongs to the claimant. The question is, should I exercise my discretion and allow a new application to be filed?
- 4 As I mentioned in paragraph 5 of my earlier decision, I am aware that the claimant filed

an application which is allegedly for this subject matter in 1998. It could be argued that allowing him now to file a new application under section 8(3) would effectively be allowing him to backdate his 1998 application. However, I do not feel that the filing of the 1998 application should count against him when deciding whether to make an order under section 8(3) because if it did, a claimant who takes the initiative by filing his or her own application would be penalised *vis à vis* a claimant who does nothing. In any case, I have not inspected the 1998 application to see just how it compares with GB 2317487 nor have I received any submissions on this point, so there may be subject matter to which the claimant is entitled in GB 2317487 which is not in his own application.

- 5 Putting the filing of the 1998 application to one side, therefore, I have come to the conclusion that it would be proper in the present circumstances to allow the claimant to file a fresh application (or applications) under section 8(3) in respect of that part of the subject matter of GB 2317487 that belongs to him. That then raises the question of how I prescribe what that part is. This is an issue that has rarely arisen before, because orders under section 8(3) are uncommon, and when they have been made, they have usually been in respect of the whole contents of the patent application in question. In the present case, the issue is in part tied up with the question of how broad a claim can properly be allowed in a new application. However, it would be quite inappropriate for me to get involved in claim drafting, and having looked at the draft order agreed by the parties, I am satisfied that, when read in conjunction with my earlier decision, it adequately identifies the matter in respect of which the new application or applications may be filed. I am therefore content to make the order sought in this respect.
- 6 Secondly, the claimant had originally sought rulings on alleged breaches of confidence in order to support a possible case under section 2(4) of the Patents Act 1977 or equivalent provisions in, for example, the legislation of other countries. I expressed reservations about the *vires* for making such rulings in proceedings under sections 8 and 12, and I note with approval that the request for this relief has now been dropped.
- 7 Thirdly, in his submission accompanying the agreed order, the claimant included the following observation on my earlier decision:

“The comptroller concluded at paragraph 62 that the smart SLM known to DERA did not extend to micro-mirrors and hence was limited to the use of liquid crystal as the light modulating medium. Whilst the claimant accepts that micro-mirrors as such are not mentioned in the claimant’s evidence, the comptroller’s attention is respectfully drawn to . . . [*he then refers to two items of evidence before concluding*] . . . Thus the claimant submits that the liquid crystal layer was recognised as but one modulating option to implement the DERA smart SLM concept.”

The evidence quoted certainly shows DERA were aware that a number of different technologies were available for SLMs, although the second item of evidence goes on to say that the technology they proposed to investigate for the pattern recognition project was the use of liquid crystal media. However, for the avoidance of doubt I should say that paragraph 62 of my previous decision was not intended to suggest that the claimant was only entitled to patent claims that are limited to the use of liquid crystals. That is quite evident from, for example, paragraph 70 of the decision.

## **Order**

8 I can now turn to the requested order itself. It is, in fact, a mix of rulings to set out in more structured form the findings I made in my previous decision and orders as to what now should or may be done in the light of those rulings. As I indicated earlier, I am happy to adopt them as they stand.

9 Accordingly, I find that:

9.1 Dr Young and Professor Chatwin were aware prior to Dr Young's employment at DERA that combining the binarised Fourier transform of a scene pattern with the binarised Fourier transform of a reference pattern and digitally displaying the combined pattern on a binary spatial light modulator in a hybrid digital/optical correlator as described in GB patent application 2317487 was a practical possibility and accordingly this invention is not owned by the Secretary of State for Defence.

9.2 DERA was developing a spatial light modulator of a pixellated type in which each pixel has a photodetector, circuitry and means to transmit or reflect light that falls on each pixel according to whether the intensity of that light is above or below a threshold and was aware that such a device could be used in the output stage of a pattern recognition correlator prior to Dr Young's employment by DERA and accordingly this invention is owned by the Secretary of State for Defence.

9.3 Dr Young was not aware prior to his employment at DERA that a spatial light modulator of a pixellated type in which each pixel has a photodetector, circuitry and means to vary the transmission or reflectivity at each pixel could be used in a hybrid digital/optical correlator as described GB patent application 2317487 as a thresholding spatial light modulator to transmit or reflect light that falls on each individual pixel according to whether the intensity of that light is above or below a threshold, but became so aware as a result of his employment by DERA and accordingly this invention is owned by the Secretary of State for Defence.

9.4 Dr Young was not aware prior to his employment at DERA that a spatial light modulator of a pixellated type in which each pixel has a photodetector, circuitry and a liquid crystal layer could be used in a hybrid digital/optical correlator as described in GB patent application 2317487 as a thresholding spatial light modulator to transmit or reflect light that falls on an individual pixel according to whether the intensity of that light is above or below a threshold, but became so aware as a result of his employment by DERA and accordingly this invention is owned by the Secretary of State for Defence.

10 In the light of those findings, I order:

10.1 Under section 8(3) of the Patents Act 1977, that the claimant may within the prescribed period set out in rule 10 of the Patents Rules 1995 file a new patent application in respect of the invention comprising the use in a hybrid digital/optical correlator as described in GB patent application 2317487 of a spatial light modulator of a pixellated type in which each individual pixel incorporates a photodetector, circuitry and means to realise non-linear reflectivity at that pixel as a thresholding spatial light modulator to transmit or reflect light that falls on each individual pixel

according to whether the intensity of that light is above or below a threshold and that new application be deemed to have been filed on the date of filing of GB patent application 2317487, namely 21 September 1996.

10.2 Under section 8(3) of the Patents Act 1977, that the claimant may within the prescribed period set out in rule 10 of the Patents Rules 1995 file a new patent application in respect of the invention comprising the use in a hybrid digital/optical correlator as described in GB patent application 2317487 of a spatial light modulator of a pixellated type in which each individual pixel incorporates a photodetector, circuitry and a liquid crystal layer as a thresholding spatial light modulator to transmit or reflect light that falls on each individual pixel according to whether the intensity of that light is above or below a threshold and that new application be deemed to have been filed on the date of filing of GB patent application 2317487, namely 21 September 1996.

10.3 That Rupert Charles David Young and, if appropriate, Chris Reginald Chatwin be required to sign any documents and forms (for example Powers of Attorney, Declarations, Oaths or Assignments) necessary to permit the Secretary of State for Defence to secure patent protection in the United Kingdom or any other country in respect of the invention set out in paragraphs 9.2 to 9.4 above, whether such protection be secured under any application arising or claiming priority from international application PCT/GB98/02876 or otherwise.

### **Costs and appeal**

- 11 Both parties have withdrawn their requests for costs. Accordingly I make no order as to costs.
- 12 As this decision does not relate to matters of procedure, under the relevant High Court Practice Direction the appeal period is six weeks.

Dated this 10<sup>th</sup> day of April 2001

**P HAYWARD**

Divisional Director, acting for the comptroller

**THE PATENT OFFICE**