Intellectual Property Office

BL O/355/18

12 June 2018

PATENTS ACT 1977

BETWEEN

IT-ACS Limited	Claimant
and	
Federal Agency for Legal Protection of Military, Special and Duel Use Intellectual Activity Results et al.	Defendants

PROCEEDINGS

Reference under section 12(1)(a) in respect of various foreign and convention patent applications derived from WO 2014/077724 A1

HEARING OFFICER Phil Thorpe

DECISION

Introduction

1 This decision relates to a reference under section 12 of the Patents Act 1977 concerning entitlement to a number of patent applications and patents. These applications and patents are derived from Russian language international patent application PCT/RU2012/000958 (publication no. WO 2014/077724 A1) which is also in issue. The other applications are European patent application number EP 12888226.3 A (publication no. EP 2921917 A1), US patent number US 2015/0248321 A1 (now granted as US 9734002 B2), Korean patent number KR 20150074110 A, Japanese patent number JP 2015536509 A and Chinese patent number CN 105103060 A. In the remainder of this decision I will refer collectively to these applications and patents as 'the applications'. The applications are currently in the name of the Federal Agency for Legal Protection of Military, Special and Duel Use Intellectual Activity Results (FSBI "FALPIAR") and Joint-Stock Company "Scientific Research Institute of Aircraft Equipment (JSC "SRIAE"). The inventors listed in all the applications are Valentin Nikolaevich Bukov, Igor Nikolaevich Averyanov, Andrei Mikhailovich Bronnikov, Andrei Leontyevich Kushnir and Nikolai Ivanovich Selvesyuk.

2 The reference was filed by IT-ACS Limited on 10th January 2017 and was served on the named applicants. The reference sought transfer of the rights in the applications so that they proceed under the name of IT-ACS Limited as the sole applicant. It also sought that Professor Igor Vasilievich Schagaev be named as the sole inventor of these applications. Professor Schagaev is currently the sole director of IT-ACS Limited. IT-ACS Limited was incorporated on 4 July 2006.

3 The reference was served on the named applicants and the named inventors on 3rd February 2017. A counterstatement was filed on behalf of "all the applicants and inventors" by Mr Guido Quiram of Michalski – Huttermann & Partner on the 11th April 2017.

4 The normal evidence rounds then ensued and a hearing was initially agreed for 21st and 22nd November 2017.

5 On 17th October the Claimant asked that the hearing be rescheduled in part because of the unavailability of their preferred counsel. The defendant then asked for a stay to proceedings pending clarification of the continued desire of all the defendants to contest the reference.

6 A case management conference was held on the 24th October 2017 at which the defendants were given until the 10th November 2017 to confirm whether they wished to proceed with the proceedings. The Office received a communication from Mr Quiram on 9th November 2017 stating that he was no longer representing the defendants in these proceedings.

7 The Office then sought to contact the applicants directly to determine their intentions. FALPIAR responded in an email of the 27th November 2017 stating that by virtue of an agreement it had with The Russian Institute of Aircraft Equipment (NIIAO), responsibility for responding to challenges to the patent rested with NIIAO. The Office contacted NIIAO by email to the address provided by FALPIAR on 28th November 2017. In that email NIIAO was asked to make clear whether it wished to continue as a party to these proceedings. A deadline of 5th December 2017 was given to respond with it being noted that a failure to respond would result in the defendants being deemed to have withdrawn from the proceedings and the reference therefore being treated as uncontested. No response was received and hence in accordance with the directions given the reference is being treated as uncontested.

The law

8 These proceedings have been brought under section 12 of the Act, the relevant parts of which read:

> 12(1) At any time before a patent is granted for an invention in pursuance of an application made under the law of any country other than the United Kingdom or under any treaty or international convention (whether or not that application has been made) -
>
> > (a) any person may refer to the comptroller the question whether he is entitled to be granted (alone or with any other persons) any such patent for that invention or has or would have any right in or under any such patent or an application for such a patent; or

(b) ...

and the comptroller shall determine the question so far as he is able to and may make such order as he thinks fit to give effect to the determination

9 Sections 12(3) and 82 of the Act set out the circumstances in which the comptroller has jurisdiction to determine questions concerning entitlement to European patent applications under section 12(1). To the extent relevant these read:

12(3) Subsection (1) above, in its application to a European patent and an application for any such patent, shall have effect subject to section 82 below.

82(4)The court and the comptroller shall have jurisdiction to determine any question to which this section applies, other than an employer-employee question, if either of the following conditions is satisfied, that is to say-

(a)…

(b) the other party claims that the patent should be granted to him and he has his residence or principal place of business in the United Kingdom and the applicant does not have his residence or principal place of business in any of the relevant contracting states;

10 The claimant, IT-ACS is a company registered in England hence there is no question that the comptroller has jurisdiction to determine the question of entitlement to the applications and to make such orders as he deems necessary to give effect to his determination.

11 The decision on who can be named as inventor and applicant fall under sections 7 and 39 of the Act, the relevant parts of which read:

7(3) In this Act “inventor” in relation to an invention means the actual deviser of the invention and “joint inventor” shall be construed accordingly.

and:

39(1) Notwithstanding anything in any rule of law, an invention made by an employee shall, as between him and his employer, be taken to belong to his employer for the purpose of this Act and all other purposes

(a) it was made in the course of the normal duties of the employee or in the course of duties falling outside his normal duties, but specifically assigned to him, and the circumstances in either case were such that an invention might reasonably be expected to result from the carrying out of his duties; or

(b) the invention was made in the course of the duties of the employee and, at the time of making the invention, because of the nature of his duties and the particular responsibilities arising from the nature of his duties he had a special obligation to further the interests of the employer's undertaking.

12 The claimant’s case is that Professor Schagaev is the sole inventor and therefore by virtue of Professor Schagaev’s employment as director of the company, IT-ACS Limited is entitled to the applications.

13 In the course of the proceedings and prior to the defendant withdrawing, I directed both parties to the importance of identifying the invention concept in the applications in issue and also identifying who is claimed to have devised it.

The applications in issue

14 The disclosure and claims in all the applications in issue are similar. For the purposes of this decision I will focus like the claimant on the disclosure in EP 2921917. This relates to a method of localising multiple failures in engineering systems. More particular the invention seeks to localise failures in a more computational efficient manner and also to better locate simultaneous failure of multiple elements.

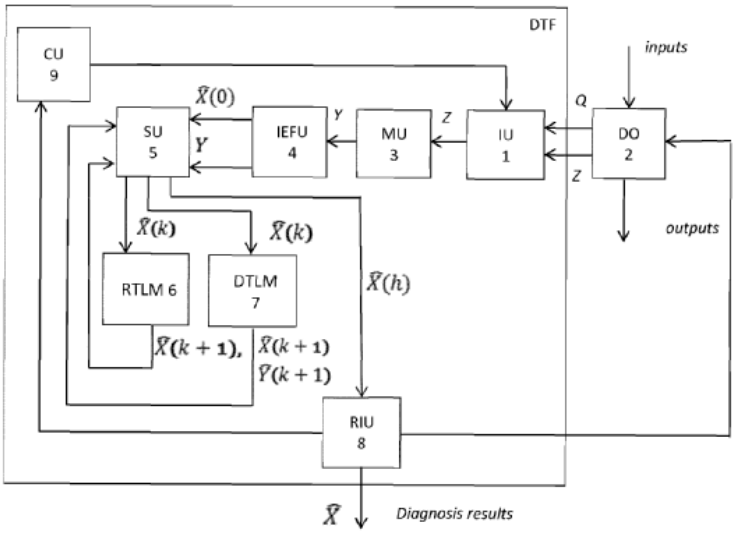

Fig. 4

15 With reference to figure 4 of the application which is reproduced above, the method receives signals from a diagnosed object (DO 2). An initial technical condition estimate vector for the diagnosed object elements is determined based on the received signals, and this vector is refined through a cyclical process by alternately using a reverse triplex logical model (RTLM 6) and a direct triplex logical model (DTLM 7) of the diagnosed object. The refined vector is used for deciding on the technical condition of the diagnosed object elements after the cyclical process is completed. The variables of the said triplex models take one of the following three values:

> 0 - the respective element of the diagnosed object is definitely operable,
>
> 1 - the respective element of the diagnosed object is definitely non-operable,
>
> * - no unambiguous conclusion on operability of the respective element of the diagnosed object may be made,

16 The present invention pre-supposes that for any real diagnosed object a directed mixed graph of manifesting and occurring failures in this object may be formed on the basis of its analysis. Fig. 7 of the application reproduced below shows, as an

example, a methodical directed mixed graph for a hypothetical diagnosed object with six vertices (that represent the elements of the diagnosed object). Some of the graph vertices may be elements with possible failures, some of them represent inner processes, and other represent manifestations of these failures. Thus, the input and the output are defined by the vertex sequence numbers only. For example, the vertices 1 and 3 are elements of the system, which may contain failures, and the vertices 2 and 5 are elements of the system, on which these failures are manifesting (and may be detected and fixed); accordingly, the vertices 4 and 6 are some inner elements that do not relate to either type, but ensure presentation of the logic of the processes studied.

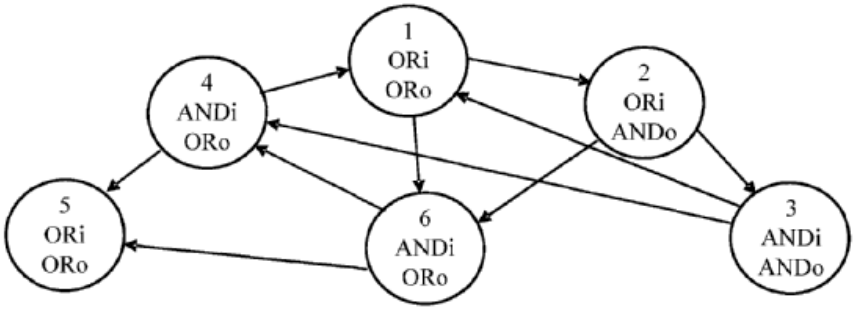

Fig. 7

17 The claimant contends that the inventive concept in the application is the use of a formalised model made of a reverse triplex logical model and a direct triplex logical model.

Background to the case

18 Since the reference is uncontested, I must accept the facts of the case to be those described in the Statement of Case and the supporting documentation submitted by the claimant. These facts can be summarised as follows.

19 In 2004, a project entitled ON-Board Active Safety System (ONBASS) was granted EU funding. The project ran from the 1st January 2005 to the 31st December 2007, and was led by a German company, Euro Telematik AG. The main goal of the ONBASS project was to propose, analyse and develop the innovative Principle for Active System Safety (PASS) for aviation.

20 The coordinator of the project was the technical representative of Euro Telematik AG, Dr Thomas Wittig. Contributions to the project were made from various institutions and companies, including a team from London Metropolitan University (London Met) that comprised Professor Schagaev amongst others. A Consortium Agreement dated 1st December 2004 was entered into by those participating in the project. The principal contribution to the project by Professor Schagaev and London Met was 'Theory and Operational Model' (London Met were the lead contractor for this part of the project). London Met also made contributions to areas of the project that were led by other parties.

21 It was acknowledged that the pre-existing know-how of Professor Schagaev would be of use in the project. A list of a number of journal articles by Professor Schagaev is included in the annex of the Consortium Agreement.

22 Professor Valentin Nikolaevich Bukov was invited by Professor Schagaev to collaborate on the ONBASS project. On 1st November 2006, Professor Bukov signed a non-disclosure agreement with London Met over the proprietary information of London Met. Schedule A to the agreement reads as follows:

SCHEDULE A

1. **Londonmet identifies the following as its Proprietary Information: Principle of Active System Safety (PASS), including the nature and description of the active safety systems, related concepts, related evaluations (feasibility studies), and any derivatives from it (TASS, ONBASS, GRASS). All current documents related to the EURRICA proposal, including variants of sections B1 and B3, slides and the material presented on 13th January 2005 DG FET ACA meeting.**

2. **Proprietary Information disclosed by Londonmet will be used for the sole purpose(s) of: all related work with respect to "PASS", "EURRICA", "ONBASS".**

23 The term specified in the agreement was five years and it thus expired on 1st November 2011. This was before the priority date of the applications which is 19th November 2012.

24 London Met and Professor Bukov also entered into a contract for the provision of consultancy services in respect of the ONBASS project. According to the claimant, Professor Bukov was contracted to develop the formal model using a binary graph model and the generalised model of active system safety. The claimant also notes that according to this contract, any IP rights of Professor Bukov in relation to work performed under the contract have been assigned to London Met by contractual terms. I note however that according to the copy of the contract provided by the claimant such IP rights are vested in the ONBASS Consortia. The period of the contract was from 20th June 2006 to 15th December 2007. The claimant contends that the only scientific contribution made by Professor Bukov during his involvement with the ONBASS project was a simplification of dependencies of the matrix (from real to binary value) used in Professor Schagaev's calculations. Professor Bukov was also not previously aware of the graphic logic model developed by Professor Schagaev.

25 The results of the London Met led part of the project was published in a document entitled "Active system safety implementation: dependency models, flight data processing and application software, Deliverable D3.X". The date of publication of this document is not entirely clear though the document does include a change log where the latest recorded change is dated 21st September 2007. The claimant has drawn my attention in particular to chapter 6.2, entitled 'Demonstration of active safety using PASS theoretical model'. It argues that the content of this chapter describes the invention of EP 2921917. I will return to this shortly.

26 On 12th April 2007, the claimant, IT-ACS Limited filed UK patent application GB 2448351. Whilst this claims a method and apparatus for an active system safety the

claimant contends that the subject matter is entirely different in substance to the subject matter of the applications in issue here.

27 In May 2007, two papers were submitted to the 2nd European Conference for Aerospace Sciences (EUCASS). Particular attention is drawn to section 6 of the second paper which is based on chapter 6 of deliverable D3.3. The two papers were co-authored by Professor Schagaev, Professor Bukov and Doctor Brian Robinson Kirk (a former director of IT-ACS).

28 On 19th November 2012, the original PCT application PCT/RU2012/000958 was filed by the defendants.

Evidence filed by the claimant

29 In addition to the documents referred to already, the claimant has also provided a range of other documentary evidence together with declarations from Professor Schagaev, and also Dr Brian Kirk, Dr Hao Cia and Dr Felix Fredrich. The latter three people were all involved in the ONBASS project and attended at least one Board meeting of the project where discussions were held regarding problems using both Direct and Reverse Logic Models (DLM and RLM). All three of these witnesses confirm that it was Dr Schagaev who led these discussions and that it was he who introduced the Graph Logic Model (GLM). Dr Kirk further states that having read EP2921917, he can confirm that using a DLM and a RLM with triplex values in the manner described in the application is identical to the implementation of the PASS algorithms and GLM rules which Professor Schagaev developed and presented during his work on the ONBASS project. Dr Hoa Cia confirms this in his statement.

30 The claimant has also provided a document comparing in detail the disclosure in the patent with that of Deliverable 3x in particular.

The nature of uncontested disputes

31 Since the defendant has decided not to continue, the case is being treated as if it is uncontested. This means as I have already indicated that I must accept the facts as presented by the claimant. Hence on the evidence provided by the claimant, which includes supporting witness statements from a number of people involved in the ONBASS project I must accept that Professor Schagaev devised the inventive concept set out in EP 2921917.

32 However it is not enough for the claimant for me simply to find that Professor Schagaev devised the inventive concept. As Lord Hoffman noted in Yeda[1]

> "The effect of s.7(4) is that a person who seeks to be added as a joint inventor bears the burden of proving that he contributed to the inventive concept underlying the claimed invention and a person who seeks to be substituted as sole inventor bears the additional burden of proving that the inventor named in the patent did not contribute to the inventive concept."

33 Here the claimant in order to gain sole entitlement to the applications wants to substitute Professor Schagaev for the currently named inventors. So far as the

[1] Yeda Research and Development Company Limited v. Rhone-Poulenc Rorer International Holdings Inc and others [2007] UKHL 43

contribution of the currently named inventors is concerned, the claimant refers to a claim made by the defendants prior to their withdrawal that a small group of researchers including professor Bukov had continued their investigations during a so called “second period” after November 2008. The defendants stated that the results obtained during this period included “formalization and using the new mathematical formalism named “tripex value for description of component states”. The claimant contends however that these features were not the work of Professor Bukov and his team but were the inventions of Professor Schagaev devised as part of the ONBASS project.

34 The claimant also contends that, notwithstanding its position that Professor Bukov and the other inventors currently listed did not devise the invention, to the extent that the other inventors were involved in any work related to the ONBASS project, then they would been in breach of the non-disclosure agreement as well as in breach of contract. It is however not clear to me how, even if that was the case, that would result in IT-ACS gaining entitlement to the application. However that is a moot point since given that the defendant is being treated as having withdrawn from these proceedings I must accept the arguments advanced by the claimant in relation to who did and didn’t devise the invention.

Conclusion and order

35 On the basis of the evidence provided by the claimant and taking into account that the defendant is being treated as having withdrawn from the proceedings, I am satisfied that Professor Schagaev is the devisor of the invention in WO 2014/077724 A1 and the applications and patents derived therefrom and that the currently named inventors did not contribute to the invention. I am also satisfied that IT-ACS Limited is entitled to these applications by virtue of its employment of Professor Schagaev.

36 I therefore order that

i) European patent application number EP 12888226.3 A, Korean patent number KR 20150074110 A, Japanese patent number JP 2015536509 A and Chinese patent number CN 105103060 A and PCT application WO 2014/077724 A1 should all proceed solely in the name of IT-ACS Limited and

ii) IT-ACS Limited be named as sole proprietor of US patent US 9734002 B2 and

iii) that the currently named inventors on European patent application number EP 12888226.3 A, Korean patent number KR 20150074110 A, Japanese patent number JP 2015536509 A, Chinese patent number CN 105103060 A, PCT application WO 2014/077724 A1 and United States patent US patent US 9734002 B2 be replaced with Professor Schagaev as the sole inventor.

Costs

37 The claimant has requested a contribution towards its costs. Notwithstanding that the defendants were deemed to have withdrawn from the proceedings the claimant is

entitled to an award of its costs up to the point of that determination. Having reviewed the proceedings I believe that an on-scale award of £700 is justified to cover the proceedings up until the time that the defendant was deemed to have withdrawn. This sum takes into account the preliminary hearing[2] held earlier in the proceedings. I will however allow the claimant 2 weeks from the date of this decision to make a submission on costs should it believe that an award in excess of that amount be justified. In the absence of any such submission then the above sum will become payable by the defendants within 7 days of the expiry of the appeal period set out below.

Appeal

38 Any appeal must be lodged within 28 days after the date of this decision.

Phil Thorpe
Deputy Director acting for the Comptroller

[2] Decision BLO/286/17