



PATENTS ACT 1977

APPLICANT The University Court of the University of Edinburgh

ISSUE Whether Patent Number GB 2451979 B should be
 revoked under Section 73(2)

HEARING OFFICER J Pullen

DECISION

Introduction

- 1 The decision concerns whether patents GB 2451979 B and EP (UK) 2018729 B1 relate to the same invention. Both patents are derived from an international application PCT/GB2007/001729 filed on 11 May 2007 with a claim to priority from an earlier GB application GB0609426.2 filed on 12 May 2006. The international application was published as WO 2007/132196 A1 on 22 November 2007. This application subsequently entered the GB national phases and, following several rounds of examination and amendment, was granted as GB 2451979 B on 1 February 2012. In parallel it also entered the EP regional phases and, following several rounds of examination and amendment, was granted as EP 2018729 B1 on 15 January 2014 designating UK. No opposition was filed. The patents have the same priority date and were filed by the same applicant.
- 2 The official letter of 31 March 2015 set out the examiner's objection that there is conflict between claims 1, 15, 16, 19 and 22, at least, of the GB patent and claim 11 of EP 2018729, when appended to claim 7 and that matter could be resolved by amending the EP(UK) patent to delete claim 11. The applicant's representative Mr Paul Higgin of Swindell & Pearson was unable to convince the examiner that the two patents related to different inventions through several rounds of correspondence and requested a hearing on the papers in his letter of 15 July 2016.

The patents

- 3 The patents relate to a low power Media Access Control (MAC) protocol and in particular to such a protocol for use in an unsynchronised, ad-hoc, low-power, wireless network. The original application referred to first and second exemplary embodiments of the invention but the claims of both patents are directed to the second embodiment with the first embodiment explicitly defined as "not claimed".
- 4 The second exemplary embodiment (illustrated in figures 5A-C) describes data transmission using data packets 40 and information packets 50. A source node S, at

an unscheduled or random time, determines if the communication channel is free and starts transmission of a concatenated sequence 62 of the same information packet 50 and then a data packet 40. The information packet 50 has a wake-up time field 52 which specifies a future time at which the receiving node should wake-up to receive the data packet 40. The information packets 50 are said to be 'the same' in the sense that they convey the same information content but are not necessarily the same physical content; for example the wake-up time may be specified in an absolute format or in a relative format, such as wake-up in X seconds, in which the value of X would vary (decrease). A destination node D, initially switched off, wakes-up 71 at a time specified by a predefined schedule and enters a 'listen and detect' state to detect 74 activity in the communications channel. When an information packet is detected the time field 52 is extracted 80 and used to augment 82 the schedule used to wake-up the destination node. The destination mode then switches off to await the next scheduled wake up time.

- 5 Both GB 2451979 B and EP 2018729 B1 include four independent claims being method and equivalent device claims for a transmitter and a receiver respectively, with a further claim to a system/network including the transmitter and receiver devices as claimed. In an annex to the submissions Mr Higgin provides a very helpful comparison of the claims of the two patents with differences highlighted in bold and underlined which is included below:

[GB] 16. A method of receiving a packet transmitted from a transmitter in an unsynchronised, ad-hoc, low-power, wireless network, the method comprising:	[EP] 7. A method of receiving data transmitted from a transmitter (S) in an unsynchronised, ad-hoc, low-power, wireless network (2), the method comprising:
switching on a receiver;	switching on (71) a receiver <u>according to a first schedule</u> ;
detecting reception of one of a plurality of successive information packets ;	detecting (74) reception of one of a succession of <u>the same packets (40, 50) transmitted without a schedule one after the other as a concatenated sequence (62) in the same communications channel, wherein the same packet is an information packet (50) comprising a time field (52) and not comprising a data payload</u> ;
<u>determining a wake-up time</u> from the received information packet; and	<u>extracting (76, 80) data (49, 52) from the received packet (40, 50); and</u>
	switching off (70) the receiver <u>until it is next scheduled to be switched on.</u>
	11. A method as claimed in any one of claims 9 to 12, wherein the extracted data (52) is used to <u>augment (82) the first schedule to include a new wake-up time before the next scheduled wakeup,</u>

switching off the receiver <u>until the wake-up time.</u>	and wherein the receiver is switched off (70) until the <u>new scheduled</u> wake-up time.
19. A method as claimed in any one of claims 16 to 18, wherein the received information packet is part of a concatenated sequence of information packets.	

The law

- 6 Section 73(2) of the Patents Act 1977 empowers the comptroller to revoke a 1977 Act patent which is for the same invention as a European patent (UK) in order to avoid having two patents in force in the UK for that invention. It reads:

“If it appears to the comptroller that a patent under this Act and a European patent (UK) have been granted for the same invention having the same priority date, and that the applications for the patents were filed by the same applicant or his successor in title, he shall give the proprietor of the patent under this Act an opportunity of making observations and of amending the specification of the patent, and if the proprietor fails to satisfy the comptroller that there are not two patents in respect of the same invention, or to amend the specification so as to prevent there being two patents in respect of the same invention, the comptroller shall revoke the patent.”

- 7 Both Section 73(2) and Section 18(5), which empowers the comptroller to refuse to grant more than one UK patent for the same invention, are regarded as embodying the principle that the same monopoly should not be granted twice. The reference to “same invention” in both sections is regarded as covering not only patents which contain claims explicitly including all of the same features but also patents with claims which differ in wording but not in substance of the scope of protection. Authorities on either section are therefore relevant to the question.
- 8 A number of authorities have been referred to including *Maag Gear Wheel and Machine Co Ltd.’s Patent* [1985] RPC 572, *SeeReal Technologies SA* (BL O/261/12), *Kimberley-Clark Worldwide Inc’s Patent* (BL O/279/04) and EPO Technical Board of Appeal decision in *Hitachi T1391/07*.

Argument and analysis

Res Judicata

- 9 In his letter of 10 February 2016 Mr Higgin alleges that the common law principle of res judicata applies as he says “the UKIPO has already determined that claim 1 of the UK patent and the equivalent of claim 11 of the European patent relate to different inventions and as a consequence of this determination required the applicant to pay a further search fee” amongst other reasons. I see no merit in these arguments. Consideration of whether to revoke a GB patent in conflict with a corresponding EP patent can only be made after both patents have been granted. The warning in the examination report of 16 December 2010 makes this abundantly clear explicitly stating that “If patents **granted** on these two applications relate to the

same invention, **the Comptroller will in due course revoke the patent granted on the present application...**. There has been no earlier judgment of this and I must therefore consider the issue.

The claims in question

- 10 In his letter Mr Higgin identifies seven features which he says are present in claim 7 of the EP patent but which are absent from claim 16 of the GB patent as granted. These are:
1. *Switching-on of the receiver is “according to a first schedule”.*
 2. *The same packets are transmitted.*
 3. *The same packets are transmitted without a schedule.*
 4. *The same packets are transmitted without a schedule one after the other as a concatenated sequence in the same communications channel.*
 5. *The information packet comprises a time field.*
 6. *The information packet does not comprise a data payload.*
 7. *Extracting data from the received packet and switching off the receiver until it is next scheduled to be switched on.*
- 11 The examiner considers that each of these features is implicit or “if ... not implicit from the GB claims, the inclusion of this feature in the EP claims would not provide an inventive or substantial difference over the GB claims”. That conclusion is based on the decision in *Maag* and each feature being the only example given in the description of the exemplary embodiment in the specification to which both sets of claims now relate. The examiner also proposes that the phrase “information packet” would be construed by the skilled reader as defining a packet containing no data payload. Mr Higgin disagrees drawing upon Section 125 and case law relating to claim construction *Kimberley-Clark* and *Hitachi*.
- 12 Regarding how the phrase “information packet” would be construed by the skilled reader I agree with the examiner; as such feature 6 is considered to be implicit.
- 13 None of features 1-5 and 7 can be regarded as implicit in claims which do not include said feature. However, as features 2 to 4 do not define steps of a method of receiving per se, but are instead related to the transmission of the packets, they cannot be seen as limiting the invention. In view of this I cannot conclude that features 2 to 4 amount to substantial differences.
- 14 Considering the relevance of the remaining features 1, 5 and 7 it is noted that these relate to the only way the relevant embodiment describes the invention operating. However, the applicant does not have to limit his claim to the embodiment described and other ways of working the invention with respect to these features could be envisaged. In each case claim 16 of the GB patent protects a method of receiving a packet with or without that feature. Whether or not the features (alone or in combination) provide a substantial difference over the GB claims is less straightforward.
- 15 Conversely, claim 16 of the granted GB patent includes the following features which are not present in claim 7 of the EP patent:

(a) *Determining a wake-up time from the received information packet.*

(b) *Switching off the receiver until the wake-up time*

- 16 Therefore, claim 7 of the EP patent protects a method of receiving a packet with or without these features. The examiner proposes that as claim 11 of the EP patent, which is dependent on claim 7, defines features (a) and (b) above it relates to the same invention as claim 16 and it should be deleted. Mr Higgin disagrees.
- 17 Whilst the examiner is right to say that claim 11 defines features (a) and (b) above the result of this is that the scope of protection of claim 11 of the EP patent is (i) narrower, by inclusion of at least features 1, 5 and 7 above, than that of claim 16 of in the GB patent and (ii) not claimed in the GB patent. The authorities establish a degree of overlap is permissible and only one patent may contain a claim to the combination of inventive features.
- 18 From the examiner's arguments it is clear that he regards claim 16 of the GB patent and claim 7 of the EP patent as defining substantially different inventions (in view of proposing that deleting claim 11 will rectify the issue) and I am inclined to I agree.
- 19 All of features 1 to 7, (a) and (b) are present in the exemplary embodiment, and in the absence of any evidence to the contrary, I see no reason to agree with the examiner that features 1, 5 and 7 do not contribute to a substantial difference whilst at the same time agreeing that features (a) and (b) do. As it is permissible for one of the patents to include a claim to the combination of features, claim 11 of the EP patent is such a claim and does not relate to the same invention as claim 16 (or any dependent claim) of the GB patent as granted for the purposes of Section 73(2).
- 20 For completeness I have reviewed the other equivalent independent and dependent claims of each patent in the same manner and have reached the same conclusion.

Method and Product Claims

- 21 With reference to the decision in *SeeReal* the examiner concludes that if method claim 16 of the GB patent conflicts with EP claim 11 then equivalent product claim 22 must also conflict. Mr Higgin disagrees. Having concluded that claim 16 of the GB patent does not conflict with EP claim 11 I do not need to consider this point.

Transmitting and Receiving claims

- 22 The examiner extends the reasoning in *SeeReal* to receiver and complementary transmitter claims and concludes that transmitter claims 1 and 15 of the GB patent relate to the same invention as claim 11 of the EP patent. Mr Higgin proposes that this is incorrect; again I agree. Whilst it is true that a transmitter and a receiver can be regarded as having the same inventive concept if they are adapted to be used together the two may be different inventions for the purpose of s73(2) as is the case here.

Decision

- 23 I find that EP (UK) 2018729 B1 and GB 2451979 B have not been granted for the same invention and I make no order for revocation of the UK patent.

J Pullen

Deputy Director, acting for the Comptroller