Internal distribution code:

(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 12 January 2017

Case Number: T 1817/15 - 3.5.05

Application Number: 01959658.4

Publication Number: 1370958

IPC: G08B25/00, H04L29/08, H04L12/26, H04Q9/00

Language of the proceedings: EN

Title of invention:
Wireless communication networks for providing remote monitoring of devices

Patent Proprietor:
SIPCO LLC

Opponent:
Spranger, Stephan

Headword:
New evidence on appeal/SIPCO

Relevant legal provisions:
EPC Art. 54, 84, 111(1), 114(2), 123(2)(3)
RPBA Art. 12(4)

Keyword:

Clarity - main request (yes, after amendment)
Added subject-matter - main request (no)
Extension of scope of protection - main request (no)
Admission of late-filed documents - (yes): appropriate reaction to amended claims and first-instance decision
Remittal to first instance for further prosecution - (yes)

Decisions cited:

T 0238/92, T 0736/99, T 0931/06, T 1146/06, T 0295/08, T 0406/09, T 0241/10, T 0828/14

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1817/15 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 12 January 2017

Appellant: (Opponent)	Spranger, Stephan Spranger + Burger Patentanwälte Widenmayerstrasse 28 80538 München (DE)
Respondent: (Patent Proprietor)	SIPCO LLC 8215 Roswell Road Building 900, Suite 950 Atlanta, GA 30350 (US)
Representative:	REHBERG HÜPPE + PARTNER Patentanwälte PartG mbB Robert-Gernhardt-Platz 1 37073 Göttingen (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 13 July 2015 concerning maintenance of the European Patent No. 1370958 in amended form.**

Composition of the Board:

Chair	A. Ritzka
Members:	K. Bengi-Akyuerek
	F. Blumer

Summary of Facts and Submissions

I. The appeal of the opponent was lodged against the interlocutory decision of the opposition division to maintain the present European patent as amended according to the claims of a "main request", submitted on 29 May 2015 in preparation for the oral proceedings held on 30 June 2015 before the opposition division. The opposition division found that claim 1 of that main request fulfilled the requirements of Articles 123(2), 123(3) and 84 EPC and that its subject-matter was novel and involved an inventive step (Articles 54 and 56 EPC) over the disclosure of

TPO-1: WO-A-01/35190.

TPO-1, cited in a third-party observation of 17 July 2014, was introduced into the proceedings by the opposition division (without any objections on the part of the proprietor) and was taken to be state of the art under Article 54(2) EPC on the ground that the patent's priority date was held invalid.

II. With the statement setting out the grounds of appeal, the appellant submitted the following prior-art documents as evidence that claim 1 of the main request as maintained did not involve an inventive step:

E6: WO-A-99/45510;
E7: US-A-5 479 400;
E8: US-A-5 987 011.

It requested that the decision under appeal be set aside and that the patent as amended be revoked on the grounds of lack of clarity (Article 84 EPC), added subject-matter (Article 123(2) EPC) and lack of novelty

and inventive step (Articles 54 and 56 EPC).

III. With a letter of reply, the respondent re-submitted the claims of the main request as maintained, and filed amended sets of claims according to eight auxiliary requests. It requested that the appeal be dismissed (as main request) or that the patent be maintained on the basis of one of those auxiliary requests. Furthermore, it indicated that prior-art documents E6 to E8 filed with the statement setting out the grounds of appeal should not be considered in the appeal proceedings since they were late-filed and not *prima facie* relevant.

IV. In an annex to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board gave its preliminary opinion on the appeal. In particular, it indicated that, on the one hand, claim 1 as maintained by the opposition division did not comply with Article 84 EPC, and that, on the other hand, the claimed subject-matter appeared to be novel over document TPO-1. Furthermore, it also stated that, if prior-art documents E6 to E8 were admitted into the appeal proceedings, remittal of the case for further prosecution on the basis of those documents would have to be discussed at the oral proceedings.

V. By a letter of reply dated 9 December 2016, the respondent filed a new main request (corresponding to the claims of the first auxiliary request on file) and replaced the eight auxiliary requests on file with auxiliary requests 1 to 5. It also indicated that it would not be appropriate to admit prior-art documents E6 to E8 into the proceedings.

VI. Oral proceedings were held on 12 January 2017, during which the allowability of the new main request and the admissibility of documents E6 to E8 were discussed.

- The appellant's final request was that the decision under appeal be set aside and that the patent be revoked.

- The respondent's final request was that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of the main request or, subsidiarily, on the basis of any of auxiliary requests 1 to 5, all requests as filed with letter dated 9 December 2016.

At the end of the oral proceedings, the board's decision was announced.

IX. Claim 1 of the **main request** reads as follows:

"A wireless communication network adapted for use in an automated monitoring system (100) for monitoring and controlling a plurality of remote devices (140) via a host computer connected to a wide area network (120), the wireless communication network comprising:

a plurality of wireless communication means (125, 135, 145) having unique first identifiers, each of the plurality of wireless communication means (125, 135, 145) configured to receive a sensor data signal from one of the plurality of remote devices (140) and transmit an original data message using a predefined wireless communication protocol, the original data message comprising the corresponding unique first identifier and sensor data signal,

wherein each of the plurality of wireless communication means (125, 135, 145) is further

configured to receive the original data message transmitted by one of the other wireless communication means (125, 135, 145) and transmit a first repeated data message using the predefined communication protocol, the first repeated data message comprising the original data message that includes the sensor data signal and the corresponding unique first identifier;
a site controller (150),

the site controller (150) being a means for receiving each of the original data messages and the repeated data messages,

the site controller (150) being a means for identifying, for each received message, the remote device (140) associated with the corresponding sensor data signal,

the site controller (150) being a means for providing information related to the sensor data signal to the wide area network (120) for delivery to the host computer,

the site controller (150) being in communication with the wireless communication means (125, 135, 145),

the site controller (150) being configured to receive the original data messages and the repeated data messages, identify the wireless communication means (125, 135, 145) associated with the corresponding sensor data signal and provide information related to the sensor data signal to the wide area network (120) for delivery to the host computer,

the site controller (150) being configured to map the wireless communication means (125, 135, 145) so as to learn all of the unique addresses and the necessary communication paths of each of the plurality of wireless communication means (125,

135, 145) by issuing a command to document the down-stream addresses and the up-stream addresses for each communication path associated with each of the plurality of wireless communication means (125, 135, 145) and logging the response data from the wireless communication means (125, 135, 145) into appropriate databases; and

a plurality of repeating means (125) having unique second identifiers, each of the plurality of repeating means (125) in communication with at least one of the plurality of wireless communication means (125, 135, 145) and each of the plurality of repeating means (125) comprising a means for receiving the original data message transmitted by at least one of the plurality of wireless communication means (125, 135, 145) and a means for transmitting a second repeated data message using the predefined communication protocol, the second repeated data message including the sensor data signal from the original data message and a unique second identifier corresponding to the repeating means (125)."

Reasons for the Decision

1. MAIN REQUEST

1.1 Claim 1 of the present main request was filed as claim 1 of the former first auxiliary request in response to the objections raised in the statement setting out the grounds of appeal, and comprises the following features (based on the labelling of the opposition division, with the amendments made to claim 1 of the main request as maintained underlined by the board):

(a) a wireless communication network adapted for use in an automated monitoring system for monitoring and

controlling a plurality of remote devices via a host computer connected to a wide-area network, the wireless communication network comprising:

(b) a plurality of wireless communication means having unique first identifiers;

(c) each of the plurality of wireless communication means configured to receive a sensor data signal from one of the plurality of remote devices and transmit an original data message using a predefined wireless communication protocol;

(d) the original data message comprising the corresponding unique first identifier and sensor data signal;

(e) wherein each of the plurality of wireless communication means are further configured to receive the original data message transmitted by one of the other wireless communication means and transmit a first repeated data message using the predefined communication protocol;

(f) the first repeated data message comprising the original data message that includes the sensor data signal and the corresponding unique first identifier;

(g) a site controller, the site controller being a means for receiving each of the original data messages and the repeated data messages;

(h) the site controller being a means for identifying, for each received message, the remote device associated with the corresponding sensor data signal;

(h') the site controller being a means for providing information related to the sensor data signal to the wide-area network for delivery to the host computer;

(h'') the site controller being in communication with the wireless communication means;

(h''') the site controller being configured to receive the original data messages and the repeated data messages, identify the wireless communication means associated with the corresponding sensor data signal and provide information related to the sensor data signal to the wide-area network for delivery to the host computer;

(h'''') the site controller being configured to map the wireless communication means so as to learn all of the unique addresses and the necessary communication paths of each of the plurality of wireless communication means by issuing a command to document the down-stream addresses and the up-stream addresses for each communication path associated with each of the plurality of wireless communication means and logging the response data from the wireless communication means into appropriate databases; and

(i) a plurality of repeating means having unique second identifiers;

(j) each of the plurality of repeating means in communication with at least one of the plurality of wireless communication means and each of the plurality of repeating means comprising a means for receiving the original data message transmitted by at least one of the plurality of wireless communication means and a means for transmitting a second repeated data message using the predefined communication protocol;

(k) the second repeated data message including the sensor data signal from the original data message and a unique second identifier corresponding to the repeating means.

1.2 *Articles 84, 123(2) and (3) EPC*

1.2.1 Following the amendments in feature (g) of present claim 1, the board is satisfied that it is sufficiently clear now that it is the "site controller" that receives each of the original and repeated data messages (Article 84 EPC; see also the board's communication under Article 15(1) RPBA, point 3).

1.2.2 At the oral proceedings before the board, the appellant submitted however that features (g), (h) and (h'), specifying that the site controller *is* ("being") the means for performing the receiving, identifying and providing steps, in combination with feature (h'''), specifying that the site controller is only *configured to* perform those steps, rendered claim 1 unclear (Article 84 EPC). This was due to the fact that it was not clear to the skilled reader whether the above steps were supposed to be executed by *one* unit (according to features (g), (h) and (h')) or *several* sub-units (according to feature (h''') of claim 1) within the site controller, and whether the site controller was used for tasks different from "controlling". Since, moreover, features (g), (h) and (h') were not included in claim 1 as originally filed and as granted, present claim 1 also gave rise to objections as to added subject-matter (Article 123(2) EPC) and as to a shift of the scope of protection (Article 123(3) EPC).

1.2.3 The board, however, holds that the wording of claim 1 - albeit not entirely precise from a linguistic perspective - provides sufficient technical information to the skilled reader to establish the scope of protection sought. In particular, the skilled reader would understand from features (g) to (h''') of claim 1

that the site controller has the corresponding means (software and/or hardware) enabling it to

- receive both the original and the repeated data messages (see features (g) and (h''));
- identify, for each received message, both the remote device *and* the wireless communication means associated with the corresponding sensor data signal (see features (h) and (h''));
- provide information related to the sensor data signal to the wide-area network for delivery to the host computer (see features (h') and (h''));
- communicate with the wireless communication means (see feature (h'')).

Hence, claim 1 is held to comply with Article 84 EPC. In addition, the board finds that the use of a site controller further limits the subject-matter of claim 1 as granted. Moreover, the inclusion of the steps of identifying, at the site controller, not only the remote device but also the wireless communication means (see feature (h''') of claim 1) further restricts the subject-matter of claim 1 as originally filed and is based on page 24, lines 1 to 17 of the original description. Accordingly, contrary to the appellant's view, present claim 1 also complies with Article 123(2) and (3) EPC.

1.3 *Novelty (Article 54 EPC)*

1.3.1 The appellant argued that **TPO-1**, besides features (a) to (h''') and (i) to (k), also disclosed feature (h'''') of present claim 1, since local gateway 210 in the system of TPO-1 likewise learned and logged the corresponding addresses of the wireless

transceivers along the downstream and upstream paths.

1.3.2 In that context, the board notes that the passages at page 21, lines 20-23 and page 22, lines 7-9 of TPO-1 referred to by the appellant read as follows:

> *"... Local gateway 210 may be configured such that memory 424 includes look up table 425 to assist in identifying the remote and intermediate transceivers used in generating and transmitting the received data transmission ..."*

and

> *"... Function codes, transmitter and or transceiver identification numbers, may all be stored with associated information within look up tables 425."*,

while page 22, lines 16-18 states the following:

> *"... For example, a first data packet segment 330 may be provided to access a first lookup table to determine the identity of the transceiver which transmitted the received message ...".*

From the above teaching, the board is able to infer merely that "local gateway 210" is supposed to store and maintain different transceiver identities (addresses) in order to later detect the transceiver which actually transmitted the received message. However, contrary to the appellant's contention, there is no direct or implicit teaching about actually sending a specific command message from the local gateway via different communication paths to the respective transceivers in order to subsequently obtain response messages, and to be eventually able to log the

received data into the appropriate databases, as specified by feature (h'''') of claim 1. Hence, the board agrees with the opposition division and the respondent that TPO-1 indeed fails to directly and unambiguously anticipate feature (h'''') of present claim 1.

1.4 *Inventive step (Article 56 EPC)*

1.4.1 As to distinguishing feature (h'''') and the assessment of inventive step of claim 1, the board notes that the decision under appeal includes the following observations in points 17 and 19.3 of its reasons (emphasis by underlining added by the board):

> "*The opposition division is also satisfied that none of the other prior art documents cited during the opposition proceedings discloses ... in particular the feature h'''')*. *This was not disputed by the opponent.*"

and

> *"... The man skilled in the art, while faced with the objective technical problem, would indeed add some type of learning procedure to discover the nodes in the network. However it is not apparent from the prior art, and the opponent did not provide any further evidence, that performing the specific learning procedure as claimed in claim 1 ... was common practice in multi hop sensor networks at the time of filing of the current application. Thus since the available prior art does not hint at this specific learning technique and the technique cannot be considered as common general knowledge at the time of filing for the*

lack of further evidence, the opposition division considers that ***claim 1 of the main request involves an inventive activity over document TPO-1."***.

1.4.2 In fact, the board agrees with the opposition division that TPO-1 *alone* cannot render the subject-matter of present claim 1 obvious, since the prior art cited in the opposition proceedings fails to disclose feature (h'''') or to demonstrate that automatic learning of the topology of a sensor network according to feature (h'''') belonged to the skilled person's common general knowledge at the patent's priority date.

2. *Admission of documents E6 to E8 into the appeal proceedings*

Prior-art documents E6, E7 and E8, together with their substantiation, were submitted for the first time with the statement setting out the grounds of appeal as evidence that the subject-matter of claim 1 as maintained did not involve an inventive step. Consequently, they were not filed in due time within the meaning of Article 114(2) EPC in conjunction with Rule 76(2)(c) EPC and thus their admissibility is subject to the board's discretion.

The respondent objected to their admission on the grounds that they could in fact have been filed earlier, e.g. shortly before or during the oral proceedings before the opposition division, and that they were not *prima facie* relevant as none of them disclosed feature (h''''). It did not however provide a detailed analysis of the technical content of those documents.

As regards the admissibility of those documents, the board therefore discusses both the procedural factors (i.e. the reasons for the late filing) and the substantive aspects (i.e. their technical relevance) in the following.

2.1 *Procedural aspects*

2.1.1 It is established jurisprudence that an appellant's submission, with its statement setting out the grounds of appeal, of fresh evidence aimed at overturning the impugned decision is to be regarded as a normal action of a losing party (see e.g. T 406/09, Reasons 2.1.3). That certainly does not mean however that such evidence is automatically to be admitted into the proceedings. Rather, in appeal proceedings, the admissibility of evidence filed with the statement setting out the grounds of appeal is governed by Article 12(4) RPBA, which confers on a board the discretionary power "to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first instance proceedings".

2.1.2 Hence, the board had first to determine whether the appellant could realistically have been expected to retrieve and submit prior-art documents E6 to E8 in the opposition proceedings. In this regard, the board establishes the following facts from the present file:

- feature (h'''') was crucial to the opposition division's acknowledgement of inventive step as regards the subject-matter claimed (see point 1.4.1 above);
- feature (h''''), taken from the description of the opposed patent, was introduced into claim 1 for the very first time one month prior to the oral

proceedings before the opposition division (see point I above), after a total of three different amended claim sets had been filed up to grant and one amended set of claims up to the summons to the first-instance oral proceedings, all of them lacking that feature (see the respondent's letters of 27 May 2003, 15 February 2010, 29 February 2012 and 27 March 2014);

- the communication accompanying the summons to the oral proceedings before the opposition division indicated that claim 1 then on file lacked novelty (Article 54 EPC) *inter alia* over document TPO-1, that the opposition division would not express any preliminary opinion on the inventiveness of claim 1, and that the main issues to be discussed in the oral proceedings were the allowability of the "current sets of claims" (see items 15, 19.5 and 20 of that communication).

2.1.3 The board concludes from the above that the appellant could *not* reasonably have been expected, within the meaning of Article 12(4) RPBA, to have filed documents E6 to E8 in the opposition proceedings, simply because it could not objectively predict, firstly, that feature (h'''') would be incorporated into new claim 1, secondly, that the claims of the main request - filed one month before the first-instance oral proceedings - would be admitted into the proceedings and, lastly, that the opposition division would reverse its negative provisional opinion on the patentability of claim 1 on the basis of added feature (h'''') in the way discussed at the oral proceedings and indicated in the appealed decision. Rather, the filing of E6 to E8 is regarded as a legitimate and appropriate reaction to the assessment of inventive step conducted in the decision under

appeal for amended claim 1 in the sense of cases T 238/92 (Reasons 2.2), T 1146/06 (Reasons 4.1), T 295/08 (Reasons 2.3), T 406/09 (Reasons 2.1.3), T 828/14 (Reasons 1) and, above all, T 241/10 (Reasons 5; based on an almost identical factual situation), with the aim of filling the gaps in the appellant's chain of argument by providing the missing evidence suggested by the decision under appeal (see point 1.4.1 above). Such an attempt to improve its position in the appeal proceedings cannot, moreover, constitute any abuse of procedure.

2.2 *Substantive aspects*

2.2.1 As regards the substantive relevance of prior-art documents, the board considers that where evidence is belatedly filed on appeal as an objectively appropriate reaction to the impugned decision (see point 2.1.3 above), such evidence should be sufficiently relevant to the outcome of the assessment of the patentability of the subject-matter claimed. However, a final decision on the relevance of these documents should not be given in the event that the case is then remitted to the first-instance department for further prosecution upon admission. Otherwise, the latitude of examination by the first-instance department would be unduly restricted (see e.g. T 736/99, Reasons 2.3.4). In other words, it would suffice in such cases to demonstrate that it is *prima facie* not unlikely that the admission of such fresh evidence could change the outcome of the assessment of the first-instance department.

2.2.2 As to the technical relevance of documents E6 to E8 in the present case, the appellant argued at the oral proceedings before the board that those documents - whether taken as evidence of the skilled person's

common general knowledge or as documents to be combined with the closest prior art TPO-1 - did indeed disclose feature (h''''), and that the skilled person in the field of telecommunication networks would consider and combine any of them with TPO-1 in order to solve an objective technical problem such as "how to implement the look-up table of TPO-1", as formulated by the appellant.

In particular, the appellant submitted that document **E6** taught the use of an automated discovery process, initiated by the workstation, to detect and store the upstream and downstream communication paths as regards the constituent nodes (see e.g. page 17, lines 14-30; page 18, lines 12-25), that document **E7** demonstrated the detection and maintenance of a list of available relay stations and corresponding links through the exchange of control packets and the storage of forwarding addresses (see e.g. column 3, lines 42-67), and that document **E8** taught the execution of an automated route discovery phase, initiated by a source node, to detect and store the corresponding upstream and downstream communication paths via broadcast query and response messages (see e.g. column 8, lines 1-14).

2.2.3 In view of the above, documents E6 to E8 appear to be related to automatically detecting and storing the overall network structure of mobile networks and thus to feature (h'''') of present claim 1. Thus, the board considers that they address the differences between present claim 1 and the disclosure of TPO-1, which were decisive for the decision of the opposition division. Thus, they appear to be sufficiently relevant to possibly influence the assessment of inventive step of claim 1 of the present main request. Consequently, the board decided to admit prior-art documents E6 to E8

into the appeal proceedings (Article 114(2) EPC and Article 12 RPBA).

3. *Remittal of the case for further prosecution*

Now that prior-art documents E6 to E8, which obviously could not have been considered by the opposition division in its assessment of inventive step, have been admitted into the proceedings, the next question is whether the board - in exercising its discretion under Article 111(1) EPC - should now decide itself on the patentability of new claim 1, in the light of those documents, or whether it should remit the case to the opposition division for further prosecution. In that regard, procedural expediency has now to be balanced against procedural fairness towards the respondent in the sense of T 931/06 (see Reasons 5), with a view to ensuring that the respondent has sufficient time to prepare a proper defence against the admitted documents.

Since the patentability of new claim 1 could not be examined and decided upon by the department of first instance in the light of prior-art documents E6, E7 and/or E8, the board holds that under the present circumstances - and especially since neither party has objected to remittal - it is not expedient to take a first and final decision on the matter of inventive step, having regard to the additional prior art, in these second-instance proceedings. It therefore decides to remit the case for further prosecution on the basis of the claims of the present main request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution on the basis of the main request (claims 1 to 6) as filed with letter dated 9 December 2016.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated