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DECISION of 19 April 2002

T 0577/00 - 3.5.1 Case Number:

Application Number: 93103563.8

Publication Number: 0560226

G05B 19/414, G05B 19/418 IPC:

Language of the proceedings: EN

## Title of invention:

Flexible communication architecture for motion control system

## Patentee:

PITNEY BOWES INC.

# Opponent:

Société SECAP

### Headword:

Flexible communication architecture/PITNEY BOWES

## Relevant legal provisions:

EPC Art. 111(1)

#### Keyword:

"Remittal to the Opposition Division after amendment"

# Decisions cited:

## Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 0577/00 - 3.5.1

DECISION
of the Technical Board of Appeal 3.5.1
of 19 April 2002

Appellant: PITNEY BOWES INC.

(Proprietor of the patent) World Headquaters

(Proprietor of the patent) World Headquaters
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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 28 March 2000 revoking European patent No. 0 560 226 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman: S. V. Steinbrener Members: R. S. Wibergh

S. C. Perryman

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# Summary of Facts and Submissions

- I. This is an appeal by the proprietor of European Patent No. 0 560 226 against the decision of the Opposition Division to revoke the patent.
- II. The respondent had opposed the patent on the grounds (Article 100(a) EPC) that the invention was not new or did not involve an inventive step having regard to among others - the document
  - D1: P. Pleinevaux et al., "Time Critical Communication Networks: Field Buses", IEEE Network, Vol. 2, No. 3, May 1988, 55-63.

It was furthermore argued that the patent did not disclose the invention as defined in claims 2 to 6 in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC).

- III. The Opposition Division held that the subject-matter of claim 1 was not inventive over D1, in particular the part summing up the features of MIL-STD 1553 (page 58). The same conclusion was arrived at with respect to claim 1 of the patent proprietor's then auxiliary request. Furthermore, the opinion was given that the patent met the requirements of Article 83 EPC.
- IV. The patent proprietor (appellant) lodged an appeal against this decision and filed, together with the statement setting out the grounds of appeal, a further document:
  - D7: N. S. Haverty, "MIL-STD 1553 a standard for data

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communications", Communication & Broadcasting, Vol. 10, No. 1, 29-33, published in 1985 or 1986.

According to the appellant D7 demonstrated that the invention was not as close to MIL-STD 1553 as the Opposition Division had been led to believe from D1.

The appellant requested at that stage that the patent be maintained as granted (main request) or according to claim 1 of an auxiliary request filed together with the grounds of appeal.

- V. By letter dated 30 November 2001 the opponent (respondent) withdrew its opposition.
- VI. By letter dated 15 March 2002 the appellant filed claims according to a first and a second auxiliary request which were to replace the auxiliary request then on file.

Claim 1 of the first auxiliary request read as follows:

- "A serial communication motion control system (10) comprising a central control node (210) and a plurality of other control nodes (230 /sic/, 310) and a serial bus (230) connecting all nodes in said system for communication; characterized in that:
- a) a plurality of said other control nodes are event-driven distributed control nodes (310) having a capability to select and asynchronously communicate with either said central control node or one of the other event-driven distributed control nodes in said system;
- b) each of said distributed control nodes (310) has a node slot register;

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- c) at least another one of said other nodes is a peripheral control node (220) having a capability to communicate synchronously with said central control node; wherein
- d) said central control node (210) is operable to download a unique slot identification number to each distributed control node (310) for storage in the node slot register thereof;
- e) each distributed control node (310) is operable to determine on the basis of the number stored in its node slot register how many slots it must wait before initiating a transmission; and
- f) during a predetermined interval said central control node (210) is operable to initiate synchronous communication with said peripheral control node (220) in accordance with a predetermined schedule and, if after completion of synchronous communication scheduled in said interval sufficient time remains in said interval, is further operable to mediate asynchronous communication between one of said distributed control nodes and either said central control node or another of said other distributed control nodes, as selected by the distributed control node performing said asynchronous communication, utilizing the time slot determined on the basis of the number stored in the node slot register".

Claim 1 of the second auxiliary request specified in more detail the way in which the distributed control nodes determine how many slots they have to wait before initiating a transmission.

VII. Oral proceedings before the Board were held on 19 April 2002. In the course of the proceedings the appellant withdrew its main request (maintenance of the patent as

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granted). The previous first auxiliary request became the new main request, and the previous second auxiliary request became the new auxiliary request.

The appellant thus demanded that the decision under appeal be set aside and that the patent be maintained as main request on the basis of the set of claims filed on 15 March 2002 as first auxiliary request or as auxiliary request on the basis of the set of claims filed on 15 March 2002 as second auxiliary request.

VIII. At the end of the oral proceedings the Chairman announced the Board's decision.

## Reasons for the Decision

#### 1. The invention

The invention is a control system comprising a serial bus and three kinds of stations, or nodes: a central node CCN, a plurality of distributed control nodes DCN, and at least one peripheral control node PCN. The communication between the CCN and the control nodes is either synchronous (CCN to PCN) or asynchronous (CCN to DCN). Within one communication cycle first the PCNs are addressed. Then, if sufficient time remains, a DCN is permitted to access the bus. According to claim 1 of the main request the contention problem between the DCNs is resolved by downloading a unique slot identification number to each DCN, on the basis of which the DCN determines how many slots it must wait before initiating a transmission. Claim 1 of the auxiliary request additionally specifies that a socalled slot control number is broadcast, and that the

number of slots a certain DCN has to wait is defined by the difference between the slot control number and the slot identification number of that DCN. By changing the slot control number it can be ensured that all DCNs have an equal chance to access the bus.

2. Compared with claim 1 as granted the independent claim of the main request has been limited by the features concerning the slot identification number, which are intended to solve a node contention problem. Claim 1 as granted dealt mainly with the communication between DCNs but not with the way the bus is accessed. This means that the nature of the invention has changed considerably. The additional features, moreover, have not been taken from dependent claims but from the description (see in particular page 10 of the patent in suit). The same is true for claim 1 according to the auxiliary request. New issues are raised on inventive step, not dealt with by the reasoning in the decision under appeal on the claims before the first instance. The Board therefore does not find it appropriate to decide itself on the amended claims but remits the case to the first instance for further prosecution (Article 111(1) EPC), including examination with respect to Articles 123(2) and (3) EPC.

## Order

## For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the first instance for further examination on the basis of the sets of claims filed as

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first and second auxiliary requests on 15 March 2002.

The Registrar: The Chairman:

M. Kiehl S. Steinbrener