

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

Paper No. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VERNON K. BOLAND

Appeal No. 2004-2175
Application 09/086,627

ON BRIEF

Before THOMAS, BARRETT, and BARRY, Administrative Patent Judges.
THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellant has appealed to the Board from the examiner's final rejection of claims 1-5, 7 and 9-16, appellant having canceled claims 6 and 8.

Representative claim 1 is reproduced below:

1. A method of allocating network resources on a computer network, comprising:

monitoring at least two nodes on the computer network among at least a first process and a second process for allocation of computer resources on each of the at least two nodes;

Appeal No. 2004-2175
Application 09/086,627

assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process;

for the first process running on at least one of the two nodes, setting a minimum resource allocation for the first process on the at least two nodes independent of the computer resources needed by other processes running on the computer network; and

redistributing computer resources on the network so that the first process is provided the minimum resource allocation for the first process is guaranteed should insufficient network resources be available.

The following references are relied on by the examiner:

Sumimoto	5,522,070	May 28, 1996
Culbert	5,838,968	Nov. 17, 1998 (filing date Mar. 1, 1996)
Hauser et al. (Hauser)	5,889,956	Mar. 30, 1999 (filing date July 18, 1996)

All claims on appeal stand rejected under 35 U.S.C. § 103. As evidence of obviousness as to claims 1-5 and 9-16, the examiner relies upon Culbert in view of Sumimoto. As to claim 7, the examiner adds Hauser to the initial combination of references.

Appeal No. 2004-2175
Application 09/086,627

Rather than repeat the positions of the appellant and the examiner, reference is made to the brief and reply brief for appellant's positions, and to the answer for the examiner's positions.

OPINION

As embellished upon here, we sustain the rejection of claims 1-5, 7, 9-13 and 15 for the reasons set forth by the examiner in the answer, but reverse the rejection with respect to claims 14 and 16, essentially for the reasons argued by appellant in the brief and reply brief.

In considering appellant's arguments in the brief and reply brief, they focus initially upon the subject matter of independent claim 1 on appeal based upon the feature recited therein that the minimum resource allocation for the first or high priority process must be guaranteed as urged initially at the bottom of page 7 of the principal brief on appeal and summarized in the paragraph bridging pages 11 and 12 of the principal brief on appeal. As to this feature, we disagree with appellant's urgings between pages 7 and 12 of the principal brief on appeal that the principal reference to Culbert does not teach or suggest this feature.

Appeal No. 2004-2175
Application 09/086,627

For emphasis, in our reasoning we make note of the teachings at column 7, lines 48-51, which is repeated essentially at column 8, lines 35-37, which teach essentially that it is the programmer who specifies the required resources for each task, the specifics of which are basically quantified according to resource management principals associated with the resource manager 170 in Figure 1 of this reference. Most significantly, as argued by the examiner in the answer, is this teaching at column 8, lines 19-23:

In the present embodiment tasks have three classes, error intolerant, error-tolerant realtime, and non-realtime. To guarantee proper functioning of error intolerant tasks, the resource manager must reserve resources for the worst-case usage scenario of these tasks (emphases added).

The significance of this is recognized at the middle of page 8 of the principal brief on appeal. The plain teaching here is that the minimum resources are guaranteed for the highest priority level(s) which obviously, within the context of the quoted material, (is) are error intolerant tasks. We also, in light of this quoted material, disagree with appellant's urging at the top of page 2 of the reply brief that "the term [reserve] is given a traditionally dictionary meaning. By definition, to 'reserve' resources is to set some resources aside or to keep

Appeal No. 2004-2175
Application 09/086,627

some resources back for future use or for some specific purpose." From our point of view, as well as we believe the artisan's, this recognition alone substantially teaches or the artisan would have recognized the use of the word "reserve" as meaning guaranteeing a minimum number of available resources for future use or specific purposes, as taught in Culbert

We continue now with our noted teachings that are significant in our conclusion that the feature of independent claim 1 on appeal that a first process is guaranteed its resources should insufficient network resources become available. This paraphrase of or the language at the end of claim 1 on appeal does not say for or with respect to what the unavailability or insufficiency occurs. However, this alone is not dispositive of the issue since the operation of the Update Resource Measurement routine activates timers on a routine bases as discussed at the bottom of column 8, yet it is stated at column 8, lines 57-59 "that error intolerant tasks never have their resource utilization records updated with actual use."

At column 9, lines 20-23 it is indicated that the act of retrieving resources from an existing task is called degradation which is essentially depicted in Figure 4 of Culbert. The concept of degradation "occurs when a task is asked to give up

some of its resources and move to a lower run level" as discussed at lines 22 and 23. Thus, appellant's assertion at the middle of page 9 of the principal brief that Culbert does not teach forcibly taking resources away from the second group of tasks even if they are a priority lower than that the first task is not well received. It is further noted that corresponding teachings exists at column 9, lines 27 and 28 and at column 11, lines 11 and 12 that "Tasks with lower priority will always be degraded as much as possible before any high priority task." In the context of the promotability of tasks in Figure 5, a corresponding complementary teaching exists at column 12, lines 36-37. Finally, we find equally compelling the teaching at column 11, lines 5-6 that a "task can respond that it can not be changed and can not give up any resources."

Thus, it is clear to us that the teaching value of Culbert at least may be fairly stated to ensure that a high priority process is guaranteed sufficient network resources irrespective of any effect on lower priority tasks which will be degraded as much as possible before any high priority task.

Appeal No. 2004-2175
Application 09/086,627

Because no arguments are presented for our consideration in the brief or reply brief as to claims 2-5, 9-13 and 15 as to the first stated rejection, the rejection of these claims is also sustained.

We note further here that in the context of the first and second stated rejections, appellant presents no arguments with respect to the Sumimoto reference relied upon by the examiner for its secondary teachings in the brief and reply brief. Only the mere recognition of its reliance by the examiner as a part of the rejections is noted in the brief discussion of the statement of the rejection at the bottom of page 10 of the principal brief on appeal. The top of page 11 of the principal brief on appeal indicates that appellant does not intend to contest the combinability of Culbert and Sumimoto within 35 U.S.C. § 103 and the remaining arguments in the brief and reply brief do not.

Before we consider the subject matter of argued dependent claim 14 and independent claim 16, we note further that no arguments have been presented for our consideration as to the second stated rejection involving claim 7 and the further teaching value of Hauser. The brief statement at page 15 of the principal brief on appeal traverses the rejection only for the

Appeal No. 2004-2175
Application 09/086,627

reasons advanced with respect to claim 1, which we have just found to be insufficient to persuade us that the examiner's position is in error with respect to the rejection of representative claim 1 on appeal. Furthermore, no arguments are presented for our consideration in the second stated rejection as to the additionally relied upon reference to Hauser.

As a final matter, we reverse the rejection of argued dependent claim 14 and its corresponding features recited in independent claim 16. The positions set forth by the examiner at pages 7 and 8 of the answer and the corresponding responsive arguments at pages 11 and 12 of the answer do not persuade us of the unpatentability of claims 14 and 16. In fact, it appears to us that the examiner has not established a prima facie case of obviousness of these claims.

In studying the examiner's initial statement of the rejection at page 7 of the answer, the examiner recognizes that Culbert does not actually teach the essential feature of claim 14 that the reallocation occurs irrespective of an amount of computer resources necessary for the second process to run on the computer network. This admission by the examiner is further stated to be recognized at page 11 of the answer. The examiner's

Appeal No. 2004-2175
Application 09/086,627

line of reasoning at page 7 of the answer relies upon "design choice" as a line of reasoning from which the artisan would conclude that Culbert suggests the feature at the end of claim 14 on appeal. The examiner's line of reasoning at pages 11 and 12 in the answer attempts to persuade us of the suggestibility of Culbert as to the questioned feature. We find none of these positions of the examiner to be persuasive.

The examiner's line of reasoning essentially stops short of meeting or suggesting the requirements of claims 14 and 16 in a corresponding manner even as admitted in essence by the examiner. The reasoning appears to be based upon mere speculation and hindsight. There is no teachings or suggestions relied upon by the examiner to buttress the actual rationale of the examiner without additional prior art; even Sumimoto is not relied upon by the examiner to buttress the examiner's reasoning with respect to Culbert.

Essentially, we are not able to conclude that it would have been obvious to the artisan to modify Culbert's system whereas essentially the examiner merely sets forth a position at the bottom of page 11 in the answer that Culbert merely suggests "the possibility of modifying the Culbert system." The categorization

Appeal No. 2004-2175
Application 09/086,627

of the three classes of tasks at column 8, lines 19-23, as reproduced earlier in this opinion relating to error intolerant, error-tolerant realtime and non-realtime tasks, is not further developed in Culbert. Although we agree with the examiner's view that Culbert teaches that guaranteed minimum resources irrespective of any other tasks that may request resources is reasonably taught and suggested in Culbert to the extent we have indicated earlier in this opinion as applicable to representative claim 1 on appeal, the reference falls far short of suggesting that this occurs "irrespective of an amount of computer resources necessary for the second process to run on the computer network" as set forth at the end of claim 14 on appeal and in essence in independent claim 16 as well.

In summary, we have affirmed the rejection of claims 1-5, 7, 9-13 and 15 but have reversed the rejection of claims 14 and 16. Therefore, the decision of the examiner is affirmed-in-part.

Appeal No. 2004-2175
Application 09/086,627

No subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

James D. Thomas)	
Administrative Patent Judge)	
)	
)	
)	
Lee E. Barrett)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Lance Leonard Barry)	
Administrative Patent Judge)	

JDT/cam

Appeal No. 2004-2175
Application 09/086,627

James M. Stover
NCR Corporation
1700 South Patterson Blvd. WHQ4
Dayton, OH 45479