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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CARL SHAWN KESSLER, GIOVANNI LANFRANCHI,
DAVID BRUCE LINDQUIST and BALA RAJARAMAN

Appeal 2010-007563
Application 11/208,298
Technology Center 2400

Before KALYAN K. DESHPANDE, JASON V. MORGAN and
BRYAN F. MOORE, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 1-10 and 21-32. Br. 1. Claims 11-20 are canceled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

INVENTION

The invention is directed to the field of software distribution on a data transmission network, and more particularly to distributing software on a data transmission network based on the scheduled time to deploy the software, the dynamic resource state of the systems involved in the deployment of the software as well as based upon environmental data, e.g., network bandwidth, work order tickets, time of day pricing for connectivity. *See Spec.* 1:6-11.

Claim 1 is exemplary of the invention and is reproduced below:

1. A method for distributing software comprising the steps of:
receiving a request to deploy an application on a designated target client station at a designated scheduled time; and
determining, by a network management server, whether to deploy said application on said designated target client station at said designated time based on a resource state of said designated target client station and a network management server as well as based on environmental conditions, wherein said environmental conditions are used to determine how opportune said deployment of said application on said designated target client station at said designated scheduled time is.

REFERENCES

Collins, III	US 5,845,090	Dec. 1, 1998
Hubinette	US 6,289,511 B1	Sept. 11, 2001

Byers	US 6,975,594 B1	Dec. 13, 2005
Newman	US 6,983,449 B2	Jan. 3, 2006

REJECTIONS AT ISSUE

Claims 1-3, 6, 7, 10, 21, 22, 24, 26-28, 30 and 32 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Collins and Hubinette. Ans. 3-11.

Claim 4, 5, 23 and 29 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Collins, Hubinette, and Byers. Ans. 11-13.

Claim 8, 9, 25 and 31 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Collins, Hubinette, and Newman. Ans. 13-16.

ISSUES

1. Did the Examiner err combining Collins and Hubinette and in finding that the combination teaches “determining whether to deploy said application on said designated client station at said designated time based on a resource state of said designated target client and network management server as well as based on environmental conditions, wherein the environmental conditions are used to determine how opportune said deployment of said application on said designated target client station at said designated scheduled time is[,]” as recited in claim 1;
2. Did the Examiner err in finding that the combination of Collins and Hubinette teaches “adjusting a time of deploying said

application on said destination target client station if said bandwidth usage in said connection that connects said network management server with said designated target client station is greater than a threshold[,]” as recited in claim 3;

3. Did the Examiner err in finding that the combination of Collins and Hubinette teaches “determining if any work orders on said designated target client station have not been completed[,]” as recited in claim 6; and
4. Did the Examiner err in finding that the combination of Collins and Hubinette teaches “adjusting a time of deploying said application on said designated target client station because a work order on said designated target client station has not been completed[,]” as recited in claim 7; and
5. Did the Examiner err in combining Collins, Hubinette, and Byers finding that the combination teaches “determining a time of day pricing for using a connection connecting said network management server with said designated target client station at said designated scheduled time[,]” as recited in claim 4; and
6. Did the Examiner err in finding that the combination of Collins, Hubinette, and Byer teaches “adjusting a time of deploying said application on said designated target client station if an expense to use said connection at said designated scheduled time exceeds a threshold[,]” as recited in claim 5; and
7. Did the Examiner err in combining Collins, Hubinette, and Newman and finding that the combination teaches “determining

processor usage in one or more of said network management server and said designated target client station[,]” as recited in claim 8; and

8. Did the Examiner err in finding that the combination of Collins, Hubinette, and Newman teaches “adjusting a time of deploying said application on said designated target client station because of processor usage in one or more of said network management server and said designated target client station exceeding a threshold[,]” as recited in claim 9?

ANALYSIS

35 U.S.C. § 103(a) – Collins and Hubinette
Claims 1-3, 6, 7, 10, 21, 22, 24, 26-28, 30 and 32

Claim 1

Appellants argue that combination of Collins and Hubinette does not teach “determining whether to deploy said application on said designated target client station at said designated time based on a resource state of said designated target client station and a network management server as well as based on environmental conditions, wherein said environmental conditions are used to determine how opportune said deployment of said application on said designated target client station at said designated scheduled time is.” App. Br. 4. Specifically, Appellants’ argument is focused on the assertion that “[t]here is no discussion in Hubinette of determining whether to deploy an application based on a resource state of the target.” *Id.* This argument is not persuasive.

Appellants do not provide a proposed definition for the term “resource state.” The Specification recites that the resource states of a system involved

in the deployment of software is something “such as the processor usage of the network management server or the processor usage of the target client station.” However, this is permissive language regarding one example of a resource state rather than a definition of what things, including processor usage, represent a resource state. Additionally, the importation of a narrow embodiment into the broader independent claim 1 is improper. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”). Given that the Appellant chose broader language representing a status of a resource rather than specifically reciting “processor usage,” we find that the broadest reasonable interpretation of “resource state” includes the status of a resource.

Hubinette teaches a software distribution system whereby the transmission determination is based in part on a schedule. Hubinette, 8:32-33. Another factor in the determination to transmit is based on the software configuration of the target, that is whether the target configuration is similar to the configuration of another. Hubinette, 8:32-60. We agree with the Examiner that the software configuration of the target meets the broadest reasonable interpretation of resource state in the context of the Specification, i.e., a status of a resource. Ans. 17. For example, the processor on the target has a configuration relating to the software to be deployed such that the configuration represents a status the resource, i.e. the processor.

Motivation to Combine

Claim 1

The Examiner finds that “[i]t would have been obvious to one skilled in the art at the time the invention was made to combine the software distribution scheduling of Collins with the particular software upgrades of Hubinette.” Ans. 4. The Examiner explains that “[t]he motivation to combine being, to decrease the total software update time by updating the computers whose configurations are in a similar state at the time of deployment.” *Id.* Appellants argue that “[t]here is no language in Hubinette (and in particular column 8, lines 32-39) that makes any suggestion to determine whether to deploy an application based on a resource state of the designated client (missing claim limitation) in order to decrease the upgrade time (Examiner’s reasoning).” Br. 12.

We note that the U.S. Supreme Court has held that “[t]he obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Instead, the relevant inquiry is whether the Examiner has set forth “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR*, 550 U.S. at 418). “As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418.

Hubinette teaches that the “schedule of software distributing [can be planned] so as to minimize the total update time for the network 100 (step 414). For instance, network nodes with similar software may be upgraded as a group [which] implies that a first network node with a particular software configuration upgrades a second network node with an equivalent or identical software configuration.” Hubinette, 8:32-36. Thus, Hubinette teaches that the resource state, i.e. software configuration, of the target is used to reduce update time. Collins uses a technique referred to as the congestion control group to ensure efficient deployment of software. Collins, 3:50-67. Both references are concerned with ensuring that the deployment of software is done efficiently. Upon reviewing the record before us, we find that the Examiner’s suggestion for modifying Collins with Hubinette suffices as an articulated reason with some rational underpinning to justify the legal conclusion of obviousness.

Appellants do not make substantive arguments regarding claims 3, 4 and thus these claims fall with claim 1. Claim 7 contains essentially the same limitation as claim 1, and claims 8-11 depend from claim 7, thus claims 7-11 fall with claim 1.

Claim 3

Claim 3 requires that the “adjusting a time of deploying said application on said destination target client station if said bandwidth usage in said connection that connects said network management server with said designated target client station is greater than a threshold.” Appellants argue that Collins does not teach this limitation. Br. 9-10. Appellants admit that “Collins teaches using a technique referred to as the congestion control

group, which is a set of two or more targets which should not receive simultaneous transmissions.” Br. 9; *see also* Collins, 3:50-67. Appellants further admit “Collins teaches that if the candidate target is a member of the congestion control group and n members of that group are presently receiving a transmission, then that candidate is disqualified from the current scan.” *Id.* Each candidate target represents a certain amount of bandwidth which must be expended to deploy software to that candidate target. Thus, we agree with the Examiner that limiting the number of members of the group which can receive a transmission at a given time to a fixed number n is equivalent to setting a threshold for the usage, i.e., bandwidth, of the connection with a target are recited in claim 3. Additionally, since the time of deploying to a candidate target which is above the threshold is delayed, Collins also teaches adjusting a time of deploying. Thus we are not persuaded by Appellants’ arguments.

Claims 6 and 7

Claim 6 recites that the “determining if any work orders on said designated target client station have not been completed.” Claim 7 recites “adjusting a time of deploying said application on said designated target client station because a work order on said designated target client station has not been completed.” The Examiner cites column 3, lines 57-59 of Collins as teaching the above-cited claim limitation. Appellants argue that “[t]here is no language in the cited passage that teaches the concept of work orders.” Br. 10. (emphasis omitted.)

This argument is persuasive. The Examiner does not respond to this argument. Additionally, in our review of each of the portions of Collins and

Hubinette cited by the Examiner, we did not find any teaching regarding the concept of work orders, and more specifically basing the deployment of an application on whether a work order is pending. Therefore, we cannot sustain the Examiner's rejection of claims 6 and 7 as well as claims 24 and 30 which contain essentially the same limitation as claim 7.

35 U.S.C. § 103(a) - Collins, Hubinette, and Byers
Claims 4, 5, 23, and 29

Claims 4 and 5

Claim 4 recites “determining a time of day pricing for using a connection connecting said network management server with said designated target client station at said designated scheduled time.” Claim 5 recites “adjusting a time of deploying said application on said designated target client station if an expense to use said connection at said designated scheduled time exceeds a threshold.” Appellants argue that “Byers teaches periodically updating the allocation pricing [, however, u]pdating the allocation pricing is not the same as” the limitation above. Br. 15. We are not persuaded by this argument. Byers explicitly teaches that real time pricing of bandwidth related to the time of day is maintained. Byers 5:55-67. Byers also teaches that the cost of a bandwidth can be maintained for a designated time duration. Byers, 7:36-56. Thus, we agree with the Examiner that the combination of Collins, Hubinette, and Byers teaches the above limitation. *See* Ans. 12.

Motivation to Combine

Claims 4 and 5

The Examiner finds that “[i]t would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Collins and Hubinette with the teachings of Byers. The motivation to combine being, to decrease the costs of implementing the method by checking the cost of transferring data between computers.” Ans. 13. Appellants argue that the Examiner does not provide a reason why one would combine Collins with Byers. Br. 16-19. As noted above, Collins teaches ensuring the efficient deployment of software and Byers teaches a way to determine the cheapest time to deploy software. Upon reviewing the record before us, we find that the Examiner’s suggestion for modifying Collins with Byers suffices as an articulated reason with some rational underpinning to justify the legal conclusion of obviousness.

Appellants do not make substantive arguments regarding claims 23 and 29, which contain essentially the same limitations as those discussed above, thus those claims fall with claims 4 and 5.

35 U.S.C. § 103(a) - Collins, Hubinette, and Newman
Claims 8, 9, 25 and 31

Claims 8 and 9

Claim 8 recites “determining processor usage in one or more of said network management server and said designated target client station.” Claim 9 recites “adjusting a time of deploying said application on said designated target client station because of processor usage in one or more of said network management server and said designated target client station

exceeding a threshold.” Appellants argue that “there is no language in the cited passage that teaches determining processor usage. Instead, Newman determines the processor requirements.” Br. 20. We are not persuaded by this argument. Newman explicitly teaches takes into account “processor capacity or storage availability”, i.e., usage. Newman, 10:17-24. Thus, we agree with the Examiner that the combination of Collins, Hubinette, and Newman teaches the above limitation. *See* Ans. 14.

Motivation to Combine

Claims 8 and 9

The Examiner finds that “[i]t would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Collins and Hubinette with the teachings of Newman. The motivation to combine being, to increase the efficiency of the method by checking to see if the available resources are available to transfer data between computers.” Ans. 15. Appellants argue that the Examiner does not provide a reason why one would combine Collins with Newman. Br. 21-23. As noted above, Collins teaches ensuring the efficient deployment of software and Newman teaches a way to determine resources are available to transfer data at a given time. Upon reviewing the record before us, we find that the Examiner’s suggestion for modifying Collins with Newman suffices as an articulated reason with some rational underpinning to justify the legal conclusion of obviousness.

Appellants do not make substantive arguments regarding claims 25 and 31, which contain essentially the same limitations as those discussed above, thus those claims fall with claims 4 and 5.

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DECISION

The Examiner's decision to reject claims 1-3, 8-10, 21, 22, 25-28, 31, and 32 is affirmed. The Examiner's decision to reject claims 6, 7, 24, and 30 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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