

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner

v.

ZILKR CLOUD TECHNOLOGIES, LLC,
Patent Owner.

IPR2023-00822
U.S. Patent No. 9,883,047

**SUPPLEMENTAL DECLARATION OF DR. HENRY HOUH
IN SUPPORT OF PETITIONER'S REPLY**

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I, Henry Houh, Ph.D., do hereby declare as follows:

I. INTRODUCTION

1. I am making this Supplemental Declaration at the request of Cisco Systems, Inc. (“Petitioner”) in support of Petitioner’s Reply in the matter of the *Inter Partes* Review of U.S. Patent No. 9,883,047 (“the ’047 patent”).

2. I am being compensated for my work in this matter at my standard hourly rate. I am also being reimbursed for reasonable and customary expenses associated with my work and testimony in this proceeding. My compensation is not contingent on the outcome of this matter or the specifics of my testimony.

3. I have been asked to provide my supplemental opinions responding to certain arguments Patent Owner and its expert have made regarding the obviousness of claims 1 and 4-7 (“the Challenged Claims”) of the ’047 patent.

4. In the preparation of this declaration, I have studied:

a. the ’047 patent, Ex.1001.

b. the prosecution history of the ’047 patent (“’047 File History”), Ex.1002.

c. U.S. Pat. Appl. Pub. No. 2013/0132854 to Raleigh et al. (“Raleigh”), Ex.1005.

5. In forming the opinions expressed below, I have considered: the documents listed above; the relevant legal standards, including the standard for

obviousness; and my own knowledge and experience based upon my work in the field of network communications and security as described below, as well as portions of the following additional materials:

- a.** U.S. Pat. No. 7,593,980 to Marascio et al. (“Marascio”), Ex.1006.
- b.** U.S. Pat. No. 7,496,054 to Taylor (“Taylor”), Ex.1007.
- c.** Microsoft Press Computer Dictionary (3d ed. 1997) (“Microsoft”) Ex.1008.
- d.** Newton’s Telecom Dictionary (18th ed. 2002) (“Newton”) Ex.1009.
- e.** U.S. Pat. App. Pub. No. 2011/0126266 to Weatherston (“Weatherston”) Ex.1010.
- f.** U.S. Pat. App. Pub. No. 20060048212 to Tsuruoka et al. (“Tsuruoka”) Ex.1011.
- g.** U.S. Pat. App. Pub. No. 2007/0240202 to Sullivan et al. (“Sullivan”) Ex.1018.
- h.** Patent Owner’s Response (“POR”), Paper 16.
- i.** Declaration of Dr. Vijay Madiseti (“Madiseti Dec.”), Ex.2004.
- j.** My previously provided declaration in this case (“Houh Dec.”), Ex.1003.

6. Unless otherwise noted, all **emphasis** in any quoted material has been added. Claim terms are *italicized*.

II. SUPPLEMENTAL OPINIONS

7. I have reviewed the POR and it is my opinion that many of Patent Owner's arguments are premised on arguments about what certain recited terms in the Challenged Claims should mean. It is my opinion that these proposed claim interpretations are not correct at least because they are contrary to the plain and ordinary meaning of the terms being construed, are not supported by the '047 patent, or both.

A. ***“subscription request for a service for a group plan” ([1.1]-[1.2])***

8. Limitations [1.1]-[1.2] recite in full:

[1.1] *receiving, by a unified services platform system, a subscription request for a service for a group plan,*

[1.2] *wherein the group plan comprises a plurality of telephone numbers, wherein each telephone number of the plurality of telephone numbers is associated with a subscriber, and*

'047 patent, claim 1, limitations [1.1]-[1.2].

9. While Patent Owner states that it is not seeking any constructions, I believe that the POR is arguing that the “*subscription request for a service for a group plan*” recited in limitation [1.1] must be interpreted to “at least include[] a

request to subscribe **each member** of a group to a service.” POR 14; Madisetti Dec., para. 55. But this claim interpretation is not supported by the ’047 patent.

10. The language of Claim 1 itself does not support Patent Owner’s interpretation. Limitation [1.1] recites a “*subscription request for a service for a group plan*.” By referring to “a group plan,” limitation [1.1] is made at a “group” level. Limitation [1.1] does not recite that the “*subscription request*” is made at the individual subscriber level, nor does it suggest this additional limitation. Limitation [1.2] does not characterize the subscription request, as Limitation [1.2] simply recites information included in a group plan. The POR also discusses Limitations [1.6] and [1.7], but those limitations relate to “*associating the service*” and “*providing access to the service*,” respectively. Neither Limitation [1.6] nor Limitation [1.6] characterize or even refer to the “*subscription request*.” Thus, it is my opinion that the language of claim 1 itself does not require that the *subscription request* in Limitation [1.1] be a “request to subscribe” **each member** of a group to a service.

11. The ’047 patent specification also does not support Patent Owner’s interpretation. Figure 12 describes a “group” level subscription process. There, an administrator user activates “a service for one or more subscribers.” ’047 patent, 30:41-43. A “request for the service”—that “may identify the specific services being requested” and a “**group plan identifier can be included** with the request to

identify the services as being associated with a group request”—is sent to the provider. ’047 patent, 30:57-62. The provider receives the request and may, in turn, send a request to the unified services platform. ’047 patent, 30:64-67. The unified services platform may then “generate the necessary configuration data to activate the new service for each subscriber in the group plan.” ’047 patent, 31:30-32.

12. In the “group” level subscription process disclosed for Figure 12 in column 30, which I address above, the “group plan identifier” in the request identifies the service as being associated with a **group** request. The service is not associated with each group member individually. After the request is received, the service may be activated, and that activation may be “for each subscriber.” But even where the activation step occurs at the individual subscriber level (i.e., for each subscriber individually, rather than for the group as a whole), there is no requirement for the subscription request to have identified the individual group members. The ’047 patent contemplates performing an intermediary step in which “Each subscriber identifier such as the telephone number can be associated with the group plan identifier.” ’047 patent, 30:62-64. Thus, a POSITA reading the disclosure in column 30 would have understood that the subscription request can just identify the group members collectively by including the group plan identifier.

13. The “group” level subscription process is different from a “individual” level subscription process, which the ’047 patent also describes. In the

“individual” level subscription process, described in column 31, “a group plan is not identified during the request to the provider.” ’047 patent, 31:54-56. Instead, “a request may identify each subscriber telephone number to which the service is to be provided in step 1306.” ’047 patent, 31:64-66. Limitation [1.1], by specifically referring to a “group plan,” contemplates the “group” level subscription process described in column 30, not the “individual” level subscription process described in column 31.

14. Patent Owner also seems to suggest that the “subscription request” must “result[] in subscribing **each member** of a group” or at least “**multiple subscribers**” of a group to a service. POR 17-18; Madisetti Dec., paras. 61, 63; *see also* POR 15 (“there is no single request for each member of the group and the users are not each subscribers of a service”); Madisetti Dec., para. 57. I disagree. Limitations [1.1] and [1.2] do not characterize the result of the “*subscription request*,” nor do they characterize the “*subscription request*” beyond stating that it is “*for a service for a group plan*.” And Limitations [1.4]-[1.7] require the sending of an “*activation request*” for the group plan, receiving the “*activation request*,” “*associating the service with each telephone number*,” and “*providing access to the service for each telephone number*,” respectively. These limitations do not require or even suggest that each member of the group becomes an individual subscriber of the service.

15. The '047 patent specification does not support Patent Owner's arguments here either. Patent Owner cites a discussion about how the unified services platform "generate[s] the appropriate activation data to activate the requested service and associate[s] the service with the existing telephone numbers of the subscribers in the group plan." '047 patent, 31:1-5. Patent Owner also references a discussion about how the unified services platform "generat[es] the necessary configuration data to activate the new service for each subscriber in the group plan." '047 patent, 31:30-32. These disclosures do not disclose or suggest that subscribers of a group plan **also** become subscribers to the service. '047 patent, 31:1-5, 31:30-32 (cited in POR 13). None of these passages address what happens after a service has been added to a group plan. On the contrary, Patent Owner's references to the '047 patent merely indicate that members of the group plan are given access to the service—which, I note, is consistent with the language claim of Limitation [1.7] (reciting "*providing access to the service for each telephone number*").

16. Therefore, while I believe that no construction is required, the '047 patent supports an understanding that a "*subscription request for a service for a group plan*" includes a request to subscribe a group to a service, where the group may be identified in the subscription request by a group identifier.

B. “*activation request*,” “*activation response*,” “*associating the service*,” and “*providing access to the service*” ([1.4]-[1.7])

17. Limitations [1.4]-[1.7] recite in full:

[1.4] *sending, by the unified services platform system, an activation request for the group plan to the third party application service provider system;*

[1.5] *receiving an activation response from the third party application service provider system;*

[1.6] *associating the service with each telephone number of the plurality of telephone numbers;*

[1.7] *providing access to the service for each telephone number based on the associating;*

’047 patent, claim 1, limitations [1.4]-[1.7].

18. Similar to the arguments presented for the “*subscription request*” limitation, Patent Owner mostly argues that the “*activation request*” recited in limitation [1.4] means a “request to activate a subscription for the service for **each member** of the group.” POR 22; Madisetti Dec., para. 69. As I discussed previously, the claim language does not require the group members to become individual service subscribers. Thus, for the reasons I discussed above, Patent Owner’s argument fails.

19. Patent Owner also suggests that the “*activation request*” must be “a request to activate a **subscription for a service**.” POR 22; Madisetti Dec., para.

69. But limitation [1.4] recites sending an activation request “*for the group plan*” and does not mention a subscription for a service. The ’047 patent specification is also broader than Patent Owner asserts. In addition to activating services, the ’047 patent also describes activating accounts with a provider: “The techniques for utilizing a third-party service after activating an account with the third-party provider may vary depending on the embodiment.” ’047 patent, 30:1-3. Patent Owner’s argument is not supported by the ’047 patent.

20. Therefore, while I believe that no construction is required, the ’047 patent supports an understanding that an “*activation request for the group plan*” includes a request to activate a service or an account for the group.

C. “*the service*” ([1.10])

21. Limitation [1.10] recites in full:

[1.10] *sending, by the unified services platform system, a second activation request for **the service** to the second third party application service provider system;*

’047 patent, claim 1, limitation [1.10].

22. Patent Owner seems to be arguing that “*the service*” recited in this limitation does not refer to “*a second service*” introduced in Limitation [1.8]. Instead, Patent Owner seems to be suggesting that “*the service*” “refers back” to “*a service*” introduced in Limitation [1.1], earlier in the claim. POR 30; Madisetti Dec., para. 81. To the extent that Patent Owner is, in fact, making this argument—

which is not clear from the POR or from Dr. Madisetti's Declaration—Patent Owner is wrong.

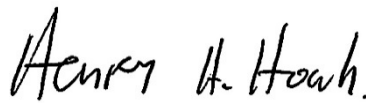
23. The “*service*” is introduced in Limitation [1.1]. For clarity, I will refer to this as the “first” service. The “*second service*” is introduced in Limitation [1.8]. Other than Limitation [1.10], Limitations [1.8]-[1.13] refer to a “*second service*.” And Limitations [1.8]-[1.13] perform operations on a “*second service*” and a “*second third party application service provider system*” and a “*second activation request*” and “*second activation response*.” There is no reference to the “[*first*] service” in any of [1.8]-[1.13] except, perhaps, for the recitation of “*the service*” in [1.10].

24. It is my opinion that reciting “*the service*” in limitation [1.10] is a typographical error. The claim structure overall indicates that limitations [1.8]-[1.13] operate on a “*second service*” that was originally introduced in limitation [1.8]. The claim language would be nonsensical if [1.10] were interpreted as referred to the “[*first*] service.” For example, the “[*first*] service” is “*provided by a [*first*] third party application service provider system*”—but Limitation [1.10] recites that “*second activation request for the service*” is sent “*to the **second** third party application service provider system*.” Since the “*second...system*” does not provide the “[*first*] service,” there would be no reason to send the “*second...system*” an “*activation request for the [*first*] service*.” And from the

process in Limitations [1.1]-[1.7], every telephone number in the group plan will have already gained access to the “[*first*] service.” PO does not explain what role there would be for a “*second activation request*” for the same service. I also note that there is nothing in the claim that would suggest “*the service*” in limitation [1.10] refers to the “[*first*] service” introduced in Limitation [1.1]. If Patent Owner is suggesting otherwise, I disagree, and the term should be construed to mean “*the second service*.”

III. CONCLUSION

25. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code.



Dated: June 15, 2024

Henry Houh, Ph.D.