



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
**United States Patent and Trademark Office**  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/263,772	04/28/2014	Jaan Leemet	03752-P0081A	1723
24126	7590	09/02/2020	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC			FAN, JOHN	
986 BEDFORD STREET			ART UNIT	
STAMFORD, CT 06905-5619			PAPER NUMBER	
			2454	
			NOTIFICATION DATE	
			DELIVERY MODE	
			09/02/2020	
			ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentpto@ssjr.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* JAAN LEEMET, PAUL SCHMIDT, ALBERT R. SUBBLOIE,  
and CHRISTOPHER J. DEBENEDICTIS

---

Appeal 2019-005972  
Application 14/263,772  
Technology Center 2400

---

Before JOHN A. EVANS, JAMES W. DEJMEK, and  
RUSSELL E. CASS, *Administrative Patent Judges*.

CASS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–9, 11–31, and 33–39 under 35 U.S.C. § 103.

Appeal Br. 1.<sup>2</sup> Claims 10 and 32 have been cancelled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

---

<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant lists Tangoe US, Inc. as the real party in interest. Appeal Brief filed January 4, 2019 (“Appeal Br.”) 2.

<sup>2</sup> Rather than repeat the Examiner's positions and Appellant's arguments in their entirety, we refer to the above mentioned Appeal Brief, as well as the following documents for their respective details: the Final Action mailed December 20, 2017 (“Final Act.”); the Claims Appendix submitted with the Response to Non-Complaint Appeal Brief dated February 14, 2019 (“Claims App.”); the Examiner's Answer mailed June 6, 2019 (“Ans.”); and the Reply Brief filed August 6, 2019 (“Reply Br.”).

## BACKGROUND

The present invention relates to a system and method that allows information related to data and communication resource usage to be gathered and analyzed such that particular data transactions can be classified based on purpose and/or type. *Abstr.* The system and method also provide reporting based on amount and type of usage, so that associated costs can be calculated and allocated to particular accounts, divisions, groups, or individuals within and outside of a company or entity. *Id.*

Appellant's Specification states that companies face a problem in that, unlike in a mailroom where each transaction can be monitored and cost allocated accordingly, data transactions cannot currently be effectively monitored. *Id.* ¶ 13. According to Appellant, most of the existing reporting systems for data use offer metrics limited to simple aggregate amounts of data used over time, which does not provide detailed usage events with data transactions for the allocation of costs or the running of reports. *Id.* Additionally, the use of applications such as Facebook, Skype, and other messaging or communication applications, reduce visibility to the user's activities as compared to traditional voice services and SMS (Short Message Service). *Id.* ¶ 14.

Appellant's invention seeks to overcome this problem by using software to collect and analyze how much "data per application," or "data per destination," or "data per application transaction type (i.e. each email size/avg size/destination etc)" is used, as opposed to the simple total "data used" format. *Id.* ¶ 26. This would include, for example, capturing application-specific units of measure, tweets, posts, likes, and so on. *Id.* From this information, costs can be allocated to the particular data transaction based on the cost system set up by the company. *Id.* ¶ 27.

Claim 1 is illustrative of the claims at issue:

1. A system for monitoring data usage of a device and generating a report relating to the data usage of the device, the system comprising:

a server connected to a network;

a storage accessible by said server;

software executing on said server for receiving a data stream relating to data used by the device;

said software extracting a data packet from the data stream;

said software analyzing the data packet to extract a first address selected from a source address or a destination address or a Universal Resource Locator (URL) to generate formatted usage data;

said software matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application running on the device that is associated with the first address and the data transaction associates data usage with an activity-based category of usage within the active application;

said software allocating a cost for the data transaction; and

said software generating a cost report based on the cost for the data transaction;

said system further comprising software executing on the device to monitor usage characteristics of a Central Processing Unit (CPU) of the device and correlating the monitored usage characteristics with active applications running on the device.

Claims App. 2.

### THE EXAMINER'S REJECTIONS

The prior art relied upon by the Examiner is set forth in the following table:

Name	Reference	Date
Talley	US 2007/0081471 A1	Apr. 12, 2007
Raleigh2	US 2012/0087319 A1	Apr. 12, 2012
Raleigh1	US 2012/0215911 A1	Aug. 23, 2012

Final Act. 4–28.

In the Final Office Action, the Examiner rejected claims 1–9, 11–28, 37, and 38 under 35 U.S.C. § 103 as being unpatentable over Raleigh1 in view of Raleigh2 and Talley. Final Act. 4–22. The Examiner also rejected claims 29–31, 33–36, and 39 under 35 U.S.C. § 103 as being unpatentable over Raleigh1 in view of Raleigh2. *Id.* at 22–28.

The Examiner determined, *inter alia*, that Raleigh1 teaches, said software matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application running on the device that is associated with the first address and the data transaction associates data usage with an activity-based category of usage within the active application.

Final Act. 5–6; Ans. 6–13. Appellant disputes the obviousness rejections, arguing that Raleigh1 only discloses the ability to determine network usage by application, but not an activity based-category of usage within a particular active application. Appeal Br. 6–12; Reply Br. 2–8.

### ANALYSIS

The central issue on this appeal is whether the cited prior art teaches, *inter alia*,

Appeal 2019-005972  
Application 14/263,772

said software matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application running on the device that is associated with the first address and the data transaction ***associates data usage with an activity-based category of usage within the active application***, as required by claim 1 (emphasis added).

The Examiner relies on Raleigh1 for this limitation, pointing specifically to paragraphs 77, 80, 82, 176, 201, 211, 258, 289, 290, 339, and Figure 23. First, the Examiner states that “categories of usage” are disclosed in the portions of paragraphs 211 and 258 reproduced below:

[T]he service processor determines application/service usage activity demand with or without granular application service usage activity (e.g., depending on various user/service plan/service provider/network/legal and/or other privacy restrictions and/or any other related requirements or settings).

[¶ 211]

[V]arious applications, OS functions, and/or other utilities/tools installed/loaded onto and/or launched executing/active on a communications device (e.g., device 100) are classified as network capacity controlled services for protecting network capacity. [¶ 258]

Ans. 7–8. Based on the above, the Examiner finds that Raleigh1 provides an “indication that the ‘network services activities’ are a category of usage within the application.” *Id.* at 8.

The Examiner further relies on Figure 23 of Raleigh1, reproduced below, as teaching the ability to determine particular categories of usage within an application, such as Facebook, Outlook, or Skype. *Id.* at 8–10.

	NBS 10%	NBS 25%	NBS 50%	NBS 75%	NBS 90%
Outlook	6	5	4	3	2
Skype	7	6	2	1	0
Safari	5	4	3	2	1
Pandora	5	4	3	2	1
FaceBook	4	3	2	1	0
iTunes	7	6	3	1	0
QuickTime	8	6	4	1	0
AV Software	9	7	5	3	1
Online Backup	3	2	1	1	0
OS Update	2	1	0	0	0

FIG. 23

Figure 23 of Raleigh1 shows priority levels assigned to various network capacity controlled services (including Outlook, Skype, FaceBook, etc.) based on the network busy state (NBS) level, which indicates what percentage of the network capacity is being utilized. Raleigh1, Fig. 23, ¶¶ 258–259.

Next, the Examiner points to the following portions of paragraphs 176, 201, and 339 of Raleigh1 to disclose an activity based category of usage within the active application:

[D]evices 100 can communicate via the central provider access and core networks 220 to the Internet 120 for access to various Internet sites/services 240 (e.g., Google sites/service, Yahoo sites/service, Blackberry services, Apple iTunes and Apple Store, Amazon.com, FaceBook and/or any other Internet service or other network facilitated service). [¶ 176]

[C]lassifying or categorizing service usage activities to associate various monitored activities (e.g., by URL, by network domain, by website, by network traffic type, by application or application type, and/or any other service usage activity categorization classification) . . . are provided. [¶ 201]

Appeal 2019-005972  
Application 14/263,772

Classification rules can include, for example, examining if one or more of the following has taken place within a specified period of time: user has interacted with the service usage activity, user has picked up the device, service usage activity UI content is in the foreground of the device UI, audio or video information is being played by the service usage activity, a certain amount of data has been communicated by the service usage activity. [¶ 339]

Ans. 9–10, 10–11.

Finally, the Examiner relies on the following portions of paragraphs 289 and 290 of Raleigh1 to disclose the ability to determine particular categories of usage within the active application:

[C]lassifying the network service usage activity further includes classifying the network service usage activity . . . into one or more of a plurality of classification categories for differential network access control for protecting network capacity. [289]

[C]lassifying the network service usage activity based on one or more of the following: application or widget (e.g., Outlook, Skype, iTunes, Android email, weather channel weather widget, iCal, Firefox Browser, etc.). [290]

*Id.* at 10, 12–13.

Appellant argues, *inter alia*, that Raleigh1 teaches the use of “service usage monitors” that act as an agent “which is installed on the device to identify which applications are using the network service” and “merely map network usage to the application.” Reply Br. 2 (citing Raleigh1 ¶¶ 215, 250). According to Appellant, this does not involve “said software matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application running on the device,” or “associat[ing] data usage with an activity-based category of usage within the active application,” as claimed. *Id.* Instead, Appellant asserts, “Raleigh’s ‘agent’ or ‘usage



Appeal 2019-005972  
Application 14/263,772

monitor’ simply knows usage that relates to the application by virtue of which application data is flowing to in a given instance,” without “the ability to go to the next step and determine what the user is actually doing with the active application with that data usage.” *Id.* at 2–3; Appeal Br. 8–10.

“Thus,” Appellant argues, “[w]hile Raleigh 1 may disclose mapping usage to applications which initiated usage, there is no indication that Raleigh can associate a ‘category of usage within the active application’ with a data transaction.” Appeal Br. 11.

We agree with Appellant that Raleigh1 does not disclose “matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application” and that “the data transaction associates data usage *with an activity-based category of usage within the active application.*” Although the Examiner has pointed to portions of Raleigh1 showing that Raleigh can map usage to particular applications, the Examiner has not sufficiently shown that Raleigh1 associates that usage with an “activity-based category of usage” within an application.

More specifically, paragraphs 211 and 258 of Raleigh1, relied on by the Examiner, disclose that the service processor determines “service usage activity demand with or without granular application/service usage activity” and that “various applications . . . are classified as network capacity controlled services for protecting network capacity,” but the Examiner fails to sufficiently show these disclosures teach associating data usage with “an activity based category of usage within the active application.” Raleigh1 ¶¶ 211, 258. Figure 23, also relied upon by the Examiner, shows that the system can determine that data is being used by particular applications (such as Outlook, Skype, Facebook, etc.), but the Examiner again fails to show

Appeal 2019-005972  
Application 14/263,772

how these paragraphs disclose associating data usage with “activity-based categories of usage” within these applications. *Id.* Fig. 23. As to Raleigh paragraphs 176, 201, and 339, the Examiner similarly fails to show how they teach associating data usage with an “activity-based category of usage,” because the Examiner fails to show how the system can determine what the user is doing on an application being used, such as Facebook, or iTunes. *Id.* ¶¶ 176, 201, 339. Paragraphs 289 and 290 also describe usage by application, and the Examiner again does not show how they determine and distinguish between different activity-based categories of usage within a particular application. *Id.* ¶¶ 289, 290.

Thus, we find that the Examiner has failed to show that Raleigh discloses

said software matching the formatted usage data to known data to generate a data transaction, wherein the known data is related to a pattern of data usage correlated with an active application running on the device that is associated with the first address and the data transaction ***associates data usage with an activity-based category of usage within the active application.***

The Examiner also does not rely on any other prior art for this limitation. Accordingly, we reverse the Section 103 rejection of claim 1, as well as the rejection of independent claims 20 and 29, which include similar limitations. We also reverse the rejection of claims 2–9, 11–19, 21–28, 30–31, and 33–39, which are dependent on claims 1, 20, or 29.

CONCLUSION

We reverse the Examiner's rejection of claims 1-9, 11-31, and 33-39.

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-9, 11-28, 37, 38	103	Raleigh1, Raleigh2, Talley		1-9, 11-28, 37, 38
29-31, 33-36, 39	103	Raleigh1, Raleigh2		29-31, 33-36, 39
<b>Overall Outcome</b>				1-9, 11-31, 33-39

REVERSED