



# 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.
14/213,241	03/14/2014	Marcel VAN OS	P7392USX1/77870000087401	7195
150004	7590	10/02/2019	EXAMINER	
DENTONS US LLP - Apple 4655 Executive Dr Suite 700 San Diego, CA 92121			GELIN, JEAN ALLAND	
			ART UNIT	PAPER NUMBER
			2643	
			NOTIFICATION DATE	DELIVERY MODE
			10/02/2019	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):

dentons\_PAIR@firsttofile.com  
patents.us@dentons.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* MARCEL VAN OS, GREGORY B. NOVICK,  
and SCOTT M. HERZ

---

Appeal 2018-002085  
Application 14/213,241  
Technology Center 2600

---

Before MAHSHID D. SAADAT, JOHN P. PINKERTON,  
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *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 1–34. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We affirm in part.

---

<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Apple Inc. (Appeal Br. 1.)

### CLAIMED SUBJECT MATTER

Appellant's disclosed and claimed invention is directed to extracting a proposed action from recorded voicemail, determining associated action parameters, and presenting a prompt to facilitate undertaking the action using the parameters. (Abstract.) Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of operating a digital assistant, comprising:
  - at a device having one or more processors and memory:
    - providing a recorded voice message from a caller to a user;
    - automatically, without user input:
      - extracting from the voice message a proposed action to be performed by the user;
      - determining at least one action parameter for undertaking the action; and
      - presenting the user with a prompt to facilitate undertaking the action using the at least one parameter.

### REJECTIONS

The Examiner rejected claims 1, 7, 8, 17, 23, 28, and 32–34 under 35 U.S.C. § 102 as anticipated by Ramamoorthy et al. (US 2007/0286399 A1, pub. Dec. 13, 2007). (Final Act. 2–4.)

The Examiner rejected claims 2, 3, 24, 25, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Miller et al. (US 7,251,313 B1, issued July 31, 2007). (Final Act. 5–6.)

The Examiner rejected claims 4, 6, 16, 26, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Cochinwala et al. (US 2011/0228913 A1, published Sept. 22, 2011). (Final Act. 6–8.)

The Examiner rejected claims 5 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy, Cochinwala, and Macwan (US 2009/0092239 A1, published Apr. 9, 2009). (Final Act. 8–9.)

The Examiner rejected claims 9 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Brown et al. (US 2003/0026392 A1, published Feb. 6, 2003). (Final Act. 9–11.)

The Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Trajkovic et al. (US 2003/0048881 A1, published Mar. 13, 2003). (Final Act. 11–12.)

The Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Gamon et al. (US 2013/0007648 A1, published Jan. 3, 2013). (Ans. 7.)

The Examiner rejected claims 12, 14, 15, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy and Macwan. (Final Act. 12–15.)

The Examiner rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy, Macwan, and Upadhyay et al. (US 8,406,745 B1, issued Mar. 26, 2013). (Final Act. 15–16.)

The Examiner rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy, Brown, and Zhang (CN 202035047 U, published Nov. 9, 2011). (Final Act. 16–17.)

The Examiner rejected claims 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Ramamoorthy, Brown, and Gamon. (Final Act. 17–18.)

#### ISSUES ON APPEAL

Appellant’s arguments present the following issues<sup>2</sup>:

*First Issue:* Whether the Examiner erred in finding Ramamoorthy discloses the independent claim 1 limitation, “extracting from the voice message a proposed action to be performed by the user,” and the commensurate limitations of independent claims 19, 23, and 28. (Appeal Br. 14–23.)

*Second Issue:* Whether the Examiner erred in finding the combination of Ramamoorthy and Brown taught or suggested the independent claim 19 limitation, “wherein the action is to meet at a specified geographic location, and the at least one action parameter comprises a name or an address of the geographic location.” (Appeal Br. 23–25.)

*Third Issue:* Whether the Examiner erred in finding the combination of Ramamoorthy and Miller taught or suggested the claim 2 limitation, “converting the recorded voice message from speech to text; and extracting the action from the text,” and the commensurate limitations of claims 24 and 29. (Appeal Br. 25–31.)

---

<sup>2</sup> Rather than reiterate the arguments of Appellant and the findings of the Examiner, we refer to the Appeal Brief (filed June 30, 2017) (“Appeal Br.”); the Reply Brief (filed Dec. 19, 2017) (“Reply Br.”); the Final Office Action (mailed June 9, 2016) (“Final Act.”); and the Examiner’s Answer (mailed Oct. 19, 2017) (“Ans.”) for the respective details.

*Fourth Issue:* Whether the Examiner erred in finding the combination of Ramamoorthy and Brown taught or suggested the claim 9 limitation, “wherein the at least one parameter includes a specific time period, and the presenting of the prompt occurs at or before the specific time period,” and in finding Ramamoorthy, Brown, and Gamon taught or suggested the similar limitation of claim 22. (Appeal Br. 31–36.)

*Fifth Issue:* Whether the Examiner erred in finding the combination of Ramamoorthy and Gamon taught or suggested the claim 11 limitation, “wherein the action is to check on the user’s availability, and the at least one parameter is retrieved from a calendar of the user.” (Appeal Br. 36–37; Reply Br. 19–22.)

*Sixth Issue:* Whether the Examiner erred in finding the combination of Ramamoorthy and Macwan taught or suggested the claim 14 limitation, “wherein the prompt offers to the user an option to store the email address extracted from the recorded voice message in association with the identified existing contact in the contact list,” and the commensurate limitation of claim 18. (Appeal Br. 37–39.)

*Seventh Issue:* Whether the Examiner erred in finding that Ramamoorthy disclosed the claim 32 limitation, “wherein extracting the proposed action comprises determining the proposed action from a plurality of proposed actions,” and the commensurate limitation of claim 33. (Appeal Br. 39–41.)

## ANALYSIS

### *First Issue*

Each of the independent claims (and by dependency the remaining claims) require “**extracting from the voice message a proposed action to**

**be performed by the user.”** (Appeal Br. 14–23.) Appellant argues the Examiner erred in finding Ramamoorthy disclosed this limitation. (Appeal Br. 14–23.) The Examiner relies on the disclosure in Ramamoorthy of a system for extracting phone numbers from voicemail messages by detecting a “trigger word” such as “call me,” which in turn initiates determination of a phone number following the trigger, and generation of a “macro” allowing a user to dial the phone number. (Final Act. 2, 19; Ans. 3; Ramamoorthy Abstr., ¶¶ 5, 33, 35, 39.)

Appellant argues this disclosure does not satisfy the limitation at issue because

Ramamoorthy merely discloses *searching* for trigger words (e.g., “call me,” . . .) and determining a *phone number*. But Ramamoorthy does not disclose “*extracting* from the voice message *a proposed action* to be performed by the user,” as recited in claim 1.

(Appeal Br. 15.) Appellant argues the Examiner disregards the plain meaning of “action” (“the process of doing” or “performance”), construes “action” inconsistently with the Specification, improperly maps the same disclosure to both the “proposed action” and the “action parameter,” and does not show that any proposed action is extracted from a voicemail message. (Appeal Br. 14–23.)

None of these arguments are persuasive. “Call me” — *i.e.*, a request in a voicemail message from the caller asking the recipient to call back — is certainly an action in the sense of Appellant’s definition: “the process of doing” or “performance.” Also, the Examiner’s reliance on the above-described disclosure in Ramamoorthy is manifestly consistent with one of the examples of the claimed subject matter described in the Specification:

A recorded voice message is provided from a caller to a user. . . .

A proposed action to be performed by the user is then extracted from the voice message. For example, the voicemail may state “this is John, call me at 650.987.0987 at 9 am tomorrow.” Here, the action is to call John.

At least one action parameter for undertaking the action is determined. . . . [T]he at least one action parameter includes (i) the telephone number of 650.987.0987. . . .

(Spec. ¶¶ 5–7.) Appellant admits that this example in the Specification is representative of the claimed subject matter. (Appeal Br. 17–18.) Relatedly, Ramamoorthy states, as an advantage of its approach, “the person receiving voice mail messages may avoid having to manually write down, type, or memorize phone numbers left in a voice mail message . . . .” Similarly, the Specification states, “[The invention] reduces or eliminates the user having to remember, write down or type in contacts details left by callers in voicemail messages.” (Ramamoorthy ¶ 16; Spec. ¶ 12.)

Nor does the Examiner improperly map the same disclosure to separate claim limitations to render limitations superfluous — with respect to the Ramamoorthy exemplary embodiment that processes, “Please call me at 555-5555,” the Examiner finds “the action parameter is ‘the phone number’ and the proposed action is ‘please call me.’” (Ans. 3.)

In addition, Ramamoorthy indeed “extracts” the proposed action from the voicemail message by virtue of the fact that, in the example the Examiner relies on, the detection of the occurrence of “call me” triggers the subsequent detection of the phone number, and further generates a macro that provides the user with the option to dial the number. (Ans. 3;

Ramamoorthy ¶¶ 33, 35, 39, 41.) The Specification “extracts” the “call me” action in the same sense:

[T]he voicemail may state “this is John, call me at 650.987.0987 at 9 am tomorrow.” Here, the action is to call John.

[T]he at least one action parameter includes (i) the telephone number of 650.987.0987. . . .

Finally, the user is presented with a prompt to facilitate undertaking the action using the at least one the parameter. For example, the user may be given the option to set a reminder to call John . . . .

(Spec. ¶¶ 6–8.) Appellant argues the fact that, in Ramamoorthy, the user is presented with additional options, such as saving or deleting the phone number, as opposed to just dialing the number, somehow undercuts the Examiner’s finding. (Appeal Br. 21.) But the fact that Ramamoorthy discloses additional user options is encompassed by the open-ended nature of the claims — “A method of operating a digital assistant, *comprising* . . . .” (*E.g.*, claim 1.) The claims require the user to be presented with a prompt to facilitate undertaking the extracted action (e.g., a prompt to call the telephone number), but the claims do not exclude facilitating additional actions as well.

Lastly, Appellant incorrectly argues that, in Ramamoorthy, “the macro actions in Ramamoorthy would be generated even if there is no proposed action in a voice message.” (Appeal Br. 22.) Although some embodiments disclosed in Ramamoorthy do not require trigger words, such a “call me,” the Examiner relies on the embodiment that does require them. (Final Act. 2; Ans. 3; Ramamoorthy ¶ 39.) As explained in Ramamoorthy, the embodiment using trigger words provides an improvement over other

embodiments: “Using trigger words may reduce the possibility of mistake (e.g., spoken numbers that are not phone numbers) . . . .” (Ramamoorthy ¶ 33.)

Accordingly, we sustain the Examiner’s rejection of independent claims 1, 23, and 28 as anticipated by Ramamoorthy.<sup>3</sup> (Appellant raises an additional argument concerning the obviousness rejection of independent claim 19, which is discussed further below.)

We also sustain the anticipation rejections of claims 7, 8, and 17; and the obviousness rejections of claims 4, 6, 16, 26, and 31 over Ramamoorthy and Cochinwala; of claims 5 and 27 over Ramamoorthy, Cochinwala, and Macwan; of claim 10 over Ramamoorthy and Trajkovic; of claims 12 and 15 over Ramamoorthy and Macwan; and of claim 13 over Ramamoorthy, Macwan, and Upadhyay. Appellant’s arguments directed to these rejections incorporate the above-discussed arguments regarding the independent claims, and the rejections are not otherwise argued separately with particularity. (Appeal Br. 22–23.)

### *Second Issue*

Independent claim 19, in addition to requiring extracting a proposed action from a voice message as discussed above, also requires, “wherein the

---

<sup>3</sup> Appellant also argues the Examiner erred in rejecting claim 23 as anticipated while relying on Ramamoorthy and additional references. (Appeal Br. 23.) However, as Appellant concedes, the Examiner relied on the additional references to support the finding that the use of a computer readable medium is inherently part of the system of Ramamoorthy. (Appeal Br. 41; Final Act. 4.) We are not persuaded the Examiner’s inherency finding is erroneous. MPEP § 2131.01 (9th ed. rev. 08.2017 Jan. 2018) (permitting reliance on additional references to show that a characteristic not disclosed in the anticipatory reference is inherent).

action is to meet at a specified geographic location, and the at least one action parameter comprises a name or an address of the geographic location.” The Examiner relies on the combination of Ramamoorthy and Brown as teaching or suggesting the claimed subject matter, and in particular relies on the above-discussed disclosure in Ramamoorthy of extracting a proposed action from a voice message, and determining an associated action parameter, combined with the disclosure in Brown of extracting geographic locations for meetings or events from voice messages that have been converted to text and which contain such phrases as “meeting is at”, “get together at”, “here at”, “location”, etc. (Final Act. 10–11; Brown Abstr., ¶¶ 46, 48.)

Appellant argues that neither Ramamoorthy nor Brown teaches any extracting of proposed actions, including the action of meeting at a specified geographic location. (Appeal Br. 23–25.) However, as discussed above, Ramamoorthy does disclose extracting proposed actions, and the Examiner relies on the ability of extracting the geographic location of a meeting or event disclosed in Brown, in combination with Ramamoorthy, as rendering claim 19 obvious. (Ans. 4.) *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)) (“[T]he test [for obviousness] is what the combined teachings of the references would have suggested to those having ordinary skill in the art.” (citation omitted)).

Accordingly, we sustain the Examiner’s rejection of claim 19 as obvious over Ramamoorthy and Brown.

We also sustain the obviousness rejections of claim 20 over Ramamoorthy, Brown, and Zhang; and of claim 21 over Ramamoorthy, Brown, and Gamon. Appellant’s arguments directed to these rejections

incorporate the above-discussed arguments regarding independent claim 19, and the rejections are not otherwise argued separately with particularity. (Appeal Br. 25.)

*Third Issue*

Dependent claims 2, 24, and 29 additionally require, “converting the recorded voice message from speech to text; and extracting the action from the text.” The Examiner relies on the combination of Ramamoorthy and Miller as teaching or suggesting the claimed subject matter, and in particular relies on the above-discussed disclosure in Ramamoorthy of extracting a proposed action from a voice message, and determining an associated action parameter, combined with the disclosure in Miller of extracting a phone number from a voicemail message by first converting the recorded speech to text. (Final Act. 5–6; Ans. 4; Miller Abstr., 5:4–10, 10:8–11.)

Appellant argues the Examiner erred because neither reference discloses extracting proposed actions from a voicemail message. (Appeal Br. 25–27.) However, as discussed above, Ramamoorthy does disclose extracting proposed actions, and the Examiner relies on the explicit disclosure in Miller of extracting information from a voicemail converted to text, in combination with Ramamoorthy, as rendering claims 2, 24, and 29 obvious. (Ans. 4.)

Appellant also argues the Examiner failed to explain why the modification of Ramamoorthy to use the speech-to-text conversion of Miller would be obvious, and that the Examiner used impermissible hindsight. (Appeal Br. 27–31.) However, we are not persuaded the Examiner erred in concluding that the disclosure in Miller of converting speech to text to facilitate extracting information from voicemail would not be an obvious

modification of Ramamoorthy, which also extracts information from voicemail. (Ans. 5.) We note that Ramamoorthy broadly teaches the use of “voice recognition software,” and that

[r]ecognition of spoken letters and words is known in the art and one of ordinary skill in the art will also recognize that the voice mail parser [] may utilize algorithms presently known or later developed to parse letters, numbers, and words . . . .

(Ramamoorthy ¶ 33.) Miller establishes that voice-to-text conversion was a well-known approach used in “voice recognition software.” (Ans. 4; *see also* Brown ¶ 42.)

Accordingly, we sustain the Examiner’s rejection of claims 2, 24, and 29 as obvious over Ramamoorthy and Miller.

We also sustain the rejections of claims 3, 25, and 30 as obvious over Ramamoorthy and Miller. Appellant’s arguments directed to these rejections incorporate the above-discussed arguments regarding claims 2, 24, and 29, and the rejections are not otherwise argued separately with particularity. (Appeal Br. 31.)

#### *Fourth Issue*

Dependent claim 9 additionally requires, “wherein the at least one parameter includes a specific time period, and the presenting of the prompt occurs at or before the specific time period.” The Examiner relies on the combination of Ramamoorthy and Brown as teaching or suggesting the claimed subject matter, and in particular relies on the above-discussed disclosure in Ramamoorthy of extracting a proposed action from a voice message, and determining an associated action parameter, combined with the disclosure in Brown of extracting information about meeting times from a voicemail message, and outputting that information before or after a user

listens to the recorded voice message. (Final Act. 9–10; Ans. 4; Brown Fig. 7, ¶¶ 48, 51.)

Appellant argues that Brown outputs the extracted meeting time information dependent solely on the time the user listens to the voice message, rather than before the meeting time (i.e., “specific time period”) as claimed. (Appeal Br. 32–33.) Appellant is correct.

Accordingly, we do not sustain the Examiner’s rejection of claim 9 as obvious over Ramamoorthy and Brown. We also do not sustain the Examiner’s rejection of claim 22 as obvious over Ramamoorthy, Brown, and Gamon, which has a similar requirement not met by the references.

#### *Fifth Issue*

Dependent claim 11 additionally requires, “wherein the action is to check on the user’s availability, and the at least one parameter is retrieved from a calendar of the user.” Appellant correctly points out that the Examiner failed to address this claim in the Final Action. (Appeal Br. 36–37.) However, in the Answer, the Examiner rejected claim 11 over the combination of Ramamoorthy and Gamon, relying on the above-discussed disclosure in Ramamoorthy of extracting a proposed action from a voice message, and determining an associated action parameter, combined with the disclosure in Gamon of extracting calendar items from electronic communications such as emails, and populating that information into a user’s calendar application as a calendar entry. (Answer 7; Gamon ¶¶ 4, 24, 25.)

In reply, Appellant argues that nowhere in Gamon is there any teaching or suggestion that information is retrieved from a user calendar as

required — rather, the only disclosure is inputting information into a calendar. (Reply Br. 19–22.) We agree with Appellant.

Accordingly, we do not sustain the Examiner’s rejection of claim 11 as obvious over Ramamoorthy and Gamon.

*Sixth Issue*

Dependent claim 14 additionally requires, “wherein the prompt offers to the user an option to store the email address extracted from the recorded voice message in association with the identified existing contact in the contact list,” and claim 18 has a similar requirement. The Examiner relies on the combination of Ramamoorthy and Macwan as teaching or suggesting the claimed subject matter, and in particular relies on the above-discussed disclosure in Ramamoorthy of extracting a proposed action from a voice message, and determining an associated action parameter, combined with the disclosure in Macwan of retrieving information not supplied in a voicemail message from a contacts database. (Final Act. 13–15; Macwan ¶ 40.)

In reply, Appellant argues that nowhere in Gamon is there any teaching or suggestion that email addresses are stored in a contact list as required — rather, the only disclosure is retrieving information from contacts. (Appeal Br. 37–39.) We agree with Appellant.

Accordingly, we do not sustain the Examiner’s rejection of claims 14 and 18 as obvious over Ramamoorthy and Macwan.

*Seventh Issue*

Dependent claims 32–34 each require, “wherein extracting the proposed action comprises determining the proposed action from a plurality of proposed actions.” The Examiner finds that Ramamoorthy discloses this

Appeal 2018-002085  
Application 14/213,241

limitation, based on the disclosure of extracting the action of calling a telephone number, as discussed above for claim 1. (Final Act. 2–4.)

Appellant argues that the Examiner provides no basis for finding that Ramamoorthy discloses a “plurality of proposed actions.” (Appeal Br. 39–41.) We agree with Appellant. Accordingly, we do not sustain the Examiner’s rejection of claims 32, 33, and 34 as anticipated by Ramamoorthy.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 7, 8, 17, 23, 28, 32–34	102	Ramamoorthy	1, 7, 8, 17, 23, 28	32–34
2, 3, 24, 25, 29, 30	103(a)	Ramamoorthy and Miller	2, 3, 24, 25, 29, 30	
4, 6, 16, 26, 31	103(a)	Ramamoorthy and Cochinwala	4, 6, 16, 26, 31	
5, 27	103(a)	Ramamoorthy, Cochinwala, and Macwan	5, 27	
9, 19	103(a)	Ramamoorthy and Brown	19	9
10	103(a)	Ramamoorthy and Trajkovic	10	
11	103(a)	Ramamoorthy and Gamon		11
12, 14, 15, 18	103(a)	Ramamoorthy and Macwan	12, 15	14, 18
13	103(a)	Ramamoorthy, Macwan, and Upadhyay	13	
20	103(a)	Ramamoorthy, Brown, and Zhang	20	
21, 22	103(a)	Ramamoorthy, Brown, and Gamon	21	22
Overall Outcome			1–8, 10, 12, 13, 15–17, 19–21, 23–31	9, 11, 14, 18, 22, 32–34

TIME PERIOD FOR RESPONSE

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

Appeal 2018-002085  
Application 14/213,241

AFFIRMED IN PART