Walker Digital Project Privileged and Confidential

Walker

US 6,487,291 Mapped to US 5,134,652

Exemplary Claim 4

October 25, 2012

'291 Claim Analysis
PREPARED FOR THE ADVICE OF COUNSEL

Claim #	Description	Mapping analysis in US5,134,652
4	A telephone call processing method that enables queuing of incoming phone calls in accordance with a given criteria. The given criteria is other than the time of the incoming calls.	Mapping is strong
NOT MAPPED REMAINING 26 CLAIMS	These include 15 independent claims and 11 dependant claims.	Not covered under the scope of current project.

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4. A method of processing telephone calls, comprising the steps of:

• establishing a queue of a plurality of incoming telephone calls ranked according to respective call information for each of said plurality of incoming telephone calls;

• determining a position in said queue between two of said plurality of incoming telephone calls for a new incoming telephone call according to associated new call information;

• and repositioning said plurality of incoming calls in said queue based on said position of said new incoming telephone call;

• wherein said new call information and said respective call information include information other than information indicative of times of receipt of the respective incoming telephone calls.

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US 6487291 [Column 2, Lines 48-52] :

 Accordingly, it is an object of this invention to provide a phone queuing system and method which enables the position of a call in a queue to be moved within the queue in accord with a determined criteria, other than a time of receipt of a call.

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach or fairly suggest, alone or in combination, the claimed feature of determining a position between two incoming telephone calls for a new incoming telephone call in a queue based on associated new call information received from a voice response unit; wherein the new call information can include economic value information or information other than indicative of times of receipt of the respective incoming telephone calls; or the claimed feature of preventing a call from being repositioned repeatedly, in order to allow for processing call within a predetermined period of time. In other words, a call with less priority would not be placed in the queue indefinitely.

position determination is based on an economic value indicator, such as: identity of the caller, quantity of items to be ordered, item numbers, catalog numbers and other data from which an economic value of the call can be determined [Summary of US 6487291]

Refer Figure 6 - Step 110

The position of a call is determined in the queue either based on an economic value or any other information other than the conventional time of receipt parameter

Refer Figure 6 - Step 110

Conventional systems used time of receipt parameter to position a new call in a queue. The '291 patent describes a method to position a new call in a queue on non-time of receipt parameters, such as identity of the caller, and quantity of items to be ordered.

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During examination of the '291 patent, in all two Office Actions based on obviousness type double patenting were generated by the Examiner. The Office Actions were based on related applications from the same applicant – now granted patents 6088444 and 6222920. The applicant filed terminal disclaimers to get over the rejections. Initially filed application had 67 claims, but later the applicant cancelled claim 1-40, and the granted version has 27 claims. The cancelled claims had a high degree of overlap with claims of the related applications. In one Office Action dated December 11, 2000, the examiner has commented that "Although the conflicting claims are not identical, they are not patentably distinct from each other because the *claims of the current application are broader in scope than the claims of the 6088444 patent*." This aspect does not seem to have been explored later in the examination history.

Interestingly, the examiner never rejected the application based on a prior art type of rejection under section 102 or 103. Further, no records of any reference identified by the examiner could be located in the file wrapper. Absence of any examiner cited reference suggests the possibility of finding highly relevant art in the domain.

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Claim Element = Color = Patent Definition
        •**Patent /File Wrapper Reference**

 A method of processing telephone calls = purple 112,48,160 = Queuing System
        •US 6487291 [Column 2, Lines 48-52]: Accordingly, it is an object of this invention to provide a phone queuing system and method which enables the position of a call in a queue to be moved within the queue in accord with a determined criteria, other than a time of receipt of a call.

establishing a queue = fuchsia 255,0,255 = Queuing System
        •US 6487291 [Column 3, Lines 60-65]: ACD 12 then reviews the call queue to determine which orders, if any, have a higher assigned economic value then a current call being considered. If there are none, the current call is ranked first in the queue and its queue position is updated accordingly.

plurality of incoming telephone calls = green 0,176,80 = Handling incoming calls
        •US 6487291 [Column 7, Lines 3-6]: For example, the ACD may be entirely omitted if the ACD functionality is incorporated into the PBX. Thus, incoming calls would be directly handled by the PBX, which would, in turn, be connected to the IVRU.

ranked according to respective call information = royal blue 0,0,255 = Prioritize calls based on call information
        •US 6487291 [Column 3, Lines 2-6]:The call's position in the queue is then adjusted in a manner that is masked from the caller, in accordance with the assigned economic value. The rank positions of other calls within the queue are then adjusted accordingly.
        •File wrapper [REASONS FOR ALLOWANCE] : ...wherein the new call information can include economic value information or information other than indicative of times of receipt of the respective incoming telephone calls...

Patent Blast

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determining a position = red 255,0,0 = Prioritize calls based on call information
 •US 6487291 [Column 3, Lines 58-62]: Once the order data and related value data have been stored, ACD 12 calculates and assigns a value to the order which is representative of its economic value.
 •File wrapper [REASONS FOR ALLOWANCE] : ...wherein the new call information can include economic value information or information other than indicative of times of receipt of the respective incoming telephone calls...

new incoming telephone calls = peach 217,150,148 = Incoming calls
 •US 6487291 [Column 3, Lines 27-31]: Referring to FIG. 1, a priority phone queuing system incorporating the invention comprises a PBX 10, an ACD 12 and an IVRU 14. PBX 10 receives incoming calls via trunk 15 and is connected to a plurality of agent terminals 16 via trunk 20.

new call information = salmon 255, 153, 51 = Information includes economic value information or information other than indicative of times of receipt
 •File wrapper [REASONS FOR ALLOWANCE] : ...wherein the new call information can include economic value information or information other than indicative of times of receipt of the respective incoming telephone calls...

repositioning = teal 51,204,204 = Prioritize calls
 •US 6487291 [Column 6, Lines 46-49]:While it is preferred that the repositioning of a call in a queue be masked from the caller, the IVRU could cause a message to be passed to a valued customer/caller that his call had been re-positioned in the call queue to achieve a faster response.

other than information indicative of times of receipt = gold 204,153,0 = Information includes economic value information or information other than indicative of times of receipt
 •File wrapper [REASONS FOR ALLOWANCE] : ...wherein the new call information can include economic value information or information other than indicative of times of receipt of the respective incoming telephone calls...

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US 6487291, Claim 4: A method of processing telephone calls, comprising the steps of:

US 5134652
[Column 2, Lines 38-49]
The following describes a method and apparatus to provide an operator of a communication console with necessary resources to quickly and efficiently handle multiple incoming communication resources simultaneously. Incoming calls are placed in an incoming-call queue according to a predetermined priority. When a next-incoming-call button is pressed, the incoming call on the top of the queue is automatically selected for the operator to handle without the operator having to keep track of calls or look for flashing LEDs. Similar queues are described which are used to find calls on hold and available resources for outgoing calls.

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establishing a queue of a plurality of incoming telephone calls ranked according to respective call information for each of said plurality of incoming telephone calls;

[Column 3, Lines 60-64]
Selection of the next incoming call is shown in a flowchart in FIG. 4. If at step 401 a new call is incoming (one that is not yet in the incoming-call queue 207), the call is placed in the incoming-call queue 207 according to a predetermined priority at step 403.

[Column 3, Lines 68 – Column 4, Line - 10]
A priority may be set up which distinguishes between emergency resources and non-emergency resources, and all emergency resources are placed at the top of the queue 207, in chronological order, and all non-emergency resources are placed below any emergency resources which may be in the queue 207. Establishing a multi-priority queue allows, for example, a call for the fire department to have priority over a previously received call simply requesting a tow truck. There are many other priorities, but no others will be detailed here for the sake of simplicity.

determining a position in said queue between two of said plurality of incoming telephone calls for a new incoming telephone call according to associated new call information;

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The new incoming call is placed into the call queue based on a predetermined priority. The priority of the existing calls in the call queue and the new incoming call is determined based on call information, such as emergency vs. non-emergency calls. Multi-priority queue allows to assign higher priority to an emergency call (Ex. fire department) received later than a non-emergency call (Ex. tow truck).

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and repositioning said plurality of incoming calls in said queue based on said position of said new incoming telephone call;

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