



- (51) International Patent Classification:
H04M 1/725 (2006.01)
- (21) International Application Number:
PCT/TR2016/000047
- (22) International Filing Date:
15 April 2016 (15.04.2016)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2015/17158 28 December 2015 (28.12.2015) TR
- (71) Applicant: **TURKCELL TEKNOLOJI ARASTIRMA VE GELISTIRME ANONIM SIRKETI** [TR/TR]; Yeni Mahalle. Pamukkale Sokak No:11, Soganlik, Kartal/Istanbul (TR).
- (72) Inventor: **TOPRAK YASAN, Burcu**; Aydinevler Mah. Inonu Cad. No:36 Kucukyali Ofispark Maltepe, Istanbul (TR).
- (74) Agent: **OZSOY, Zeliha**; Trittech Patent Trademark Consultancy Inc., Cankaya Mahallesi Mahmut Yesari Sokak No:8/5, Cankaya/Ankara (TR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report (Art. 21(3))

(54) Title: A SYSTEM FOR DATA SHARING BETWEEN PARTIES DURING CALL

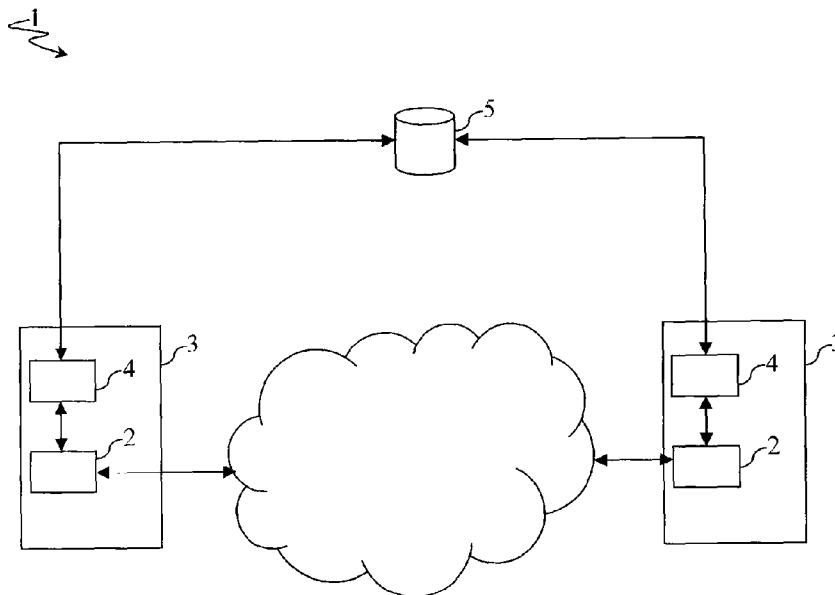


Figure 1

(57) Abstract: The present invention relates to a system (1) enabling parties to perform data share such as image, video, location information, contact information, text with each other during calls to be established over global system for mobile communications (GSM) network.

A SYSTEM FOR DATA SHARING BETWEEN PARTIES DURING CALL

5 **Technical Field**

The present invention relates to a system enabling parties to perform data share such as image, video, location information, contact information, text with each other during calls to be established over global system for mobile communications
10 (GSM) network.

Background of the Invention

Today, a large number of call establishments are performed over global system
15 for mobile communications (GSM) network for mobile communication upon use of mobile phones become widespread has become widespread.

It is also possible to establish call over Internet by means of applications downloaded to phones upon rapid improvement of technology. Free international
20 or local telephone calls, messaging, video talk can be made and even online meetings can be hold and conference calls can be made by using data transfer over Internet (VOIP_Voice Over IP) used by this method. In said applications, data share can be performed during call between the persons being party to the call when a call is established.

25

However, parties cannot perform data share such as image, video, location information, contact information, text with each other during a call established over global system for mobile communications network.

30 The United States patent document no. **US7483418** discloses a method which enables to send audio and digital data among mobile devices synchronously.

However, it is disclosed in the invention described in the said document that the data which can be sent among mobile devices is only an image received from the mobile phone camera.

5 **Summary of the Invention**

An objective of the present invention is to realize a system enabling parties to perform data share such as image, video, location information, contact information, text with each other during calls to be established particularly over
10 global system for mobile communications (GSM) network.

Detailed Description of the Invention

“A System for Data Sharing between Parties during Call” realized to fulfil the
15 objectives of the present invention is shown in the figure attached, in which:

Figure 1 is a schematic view of the inventive system.

The components illustrated in the figure are individually numbered, where the
20 numbers refer to the following:

1. System
2. Call application
3. Mobile device
- 25 4. Data transfer application
5. Server of data transfer application

The inventive system (1) comprises:

30 at least one mobile device (3) which can run applications such as the call application (2) essentially enabling to establish network over global system for mobile communications (GSM) network, maintain the

established calls, end the established calls and receive incoming calls on thereof;

at least one data transfer application (4) which runs on the mobile device (3), enables the user to make data selection from the applications running on the mobile device (3) so as to be sent to the other party and/or parties being involved in the call during a call established; and

at least one server of data transfer application (5) which is in communication with the data transfer application (4) by using any remote communication protocol included in the state of the art and receives the data related to the user selections received from the data transfer application (4) and sends the said data to the other party being included in the call by using a data service provided over wired or wireless communication networks.

15 The mobile device (3) included in the inventive system (1) is an electronic device such as smart phone, tablet computer which can essentially run at least one application on itself. has at least one display that enables menus of the applications running on thereof to be displayed and at least one input unit such as touchscreen or keypad that enables to make a choice from the menus of the applications. The call application (2) running on the inventive mobile device (3) enables to establish call over global system for mobile communications network, to continue the established call, to end the established call and to receive the incoming calls by methods in the state of the art. In a preferred embodiment of the invention, on the mobile device (2): there are a gallery application wherein media such as picture, image, and video are recorded; an address book wherein contact information of the person desired to be communicated are recorded; a location detection application which enables to detect instant location; a notepad which enables users to write text. Except the applications included in the above-mentioned preferred embodiment, there may be any application on the mobile device (3).

The data transfer application (4) included in the inventive system (1) runs on the mobile device (3) and it enables to make data exchange between the mobile devices (3) having the data transfer application (4) during a call established by the mobile device (2). In a preferred embodiment of the invention, the data transfer application (4) starts running depending on the user's request; communicates with the applications located on the mobile device (3) after it starts running and it ensures that the call desired to be established by the user is established by the global system for mobile communications network by triggering the mobile device (2) when a call is desired to be established by a user. In an alternative embodiment of the invention, the data transfer application (4) starts running upon being triggered by the mobile device (2) when it is requested to establish call over the mobile device (2) or receive the incoming call by the user. In a different embodiment of the invention, the data transfer application (4) starts running during the call established upon being triggered by the data coming from the server of data transfer application (5). In a more different embodiment of the invention, the data transfer application (4) starts running depending on the user's request during the established call. After the data transfer application (4) starts running, it communicates with other applications located on the mobile device (3) and allows the user to make choice from the said applications during a call established. For example, in a different embodiment of the invention, the user can choose a picture or video from the gallery application by entering the gallery application over the data transfer application (4) so as to send the call to the other party and/or parties being included in the call while a call is established by the mobile device (2) and the data transfer application (4) is in operating state. The data transfer application (4) sends the data chosen from the other applications by the user to the server of data transfer application (5) by using a data service provided over wired and wireless communication networks. In one embodiment of the invention, the data transfer application (4) sends the data chosen from the other applications by the user to the server of data transfer application (5) by connecting to Internet by means of a data service provided over mobile networks of a type such as 3G, LTE, etc. In a different embodiment of the invention, the

data transfer application (4) sends the data chosen from the other applications by the user to the server of data transfer application (5) by connecting to Internet over wi-fi or Ethernet.

5 The server of data transfer application (5) included in the inventive system (1) is in communication with the data transfer application (4) running on the mobile devices (2). The server of data transfer application (5) takes the data received from the data transfer application (4) and sends these data to the data transfer application (4) where to the said data are desired to be sent. The server of data transfer application (5) receives the data coming from the data transfer application (4) by using a data service provided over wired and wireless communication networks and sends the received data to the data transfer application (4) by using a data service provided over wired and wireless communication networks. In one embodiment of the invention, the server of data transfer application (5) sends the data to the data transfer application (4) by connecting to Internet by means of a data service provided over mobile networks of a type such as 3G, LTE, etc. In a different embodiment of the invention, the server of data transfer application (5) sends the data to the data transfer application (4) by connecting to Internet over wi-fi or Ethernet.

20

In order to make data transfer from a mobile device (3) to another mobile device (3) by means of the data transfer application (4) in the inventive system (1), the data transfer application (4) must be located on both mobile devices (3).

25 When a data reaches from the server of data transfer application (5) to the data transfer application (4) installed on the mobile device (3) in one embodiment of the inventive system (1), the data transfer application (4) enables the user to be warned vocally and/or visually when a data is received.

30 In one embodiment of the inventive system (1), the data transfer application (4) performing the sending informs the user in writing and/or vocally and/or visually

about the fact that the data is sent by the other user when the data sent by the data transfer application (4) installed on the mobile device (3) is displayed by the user of the mobile device (3) where it is sent over the data transfer application (4).

5 An exemplary scenario including: establishing call to a B mobile device (3) having the call establishing application (2), the data transfer application (4) and the location detection application by a A mobile device (3) having the call establishing application (2), the data transfer application (4) and the location detection application of the invention and A mobile device (3) sends the location data to the B mobile device (3) during the call is described below. In the said
10 scenario, the A mobile device (3) gives instruction to the B mobile device (3) for establishing call over the global system for mobile communications network by running the data transfer application (4) and located on the mobile device (3). The data transfer application (4) located on the A mobile device (3) first
15 communicates with the applications located on the mobile device (3) and then enables the call application (2) to make a call establishing request so as to establish call with the B mobile device (3) by triggering the call application (2). The call application (2) located on the B mobile device (3) receives and accepts the call request – which is received from the call application (2) of the A mobile
20 device (3) – over the global system for mobile communications network. Thus, a call is established between the A mobile device (3) and the B mobile device (3) over the global system for mobile communications network. When the user of the A mobile device (3) wants to share his/her instant location data with the user of the B mobile device (3) during the established call, s/he enters the location
25 detection application over the data transfer application (4) running on the A mobile device (3) and gives instruction to the data transfer application (4) for sending the said data to the user of the B mobile device (3) by choosing the instant location data. The data transfer application (4) located in the A mobile device (3) sends the related location data to the server of data transfer application (5) over
30 the data transfer application in accordance with the said instruction. The server of data transfer application (5) sends the said instant location data received from the

data transfer application (4) located in the A mobile device (3) to the data transfer application (4) of the B mobile device (3) again over Internet. If the data transfer application located in the B mobile device (3) is in operating state when data is received from the server of data transfer application (5), the user of the B mobile device (3) can display the said data over the data transfer application (4) whenever s/he wants. If the data transfer application located in the B mobile device (3) is in off state when data is received from the server of data transfer application (5), it starts running upon being triggered by the incoming data and the user of the B mobile device (3) can display the said data over the data transfer application (4) whenever s/he wants.

Within these basic concepts, it is possible to develop a great variety of embodiments of the inventive “System for Data Sharing between Parties during Call (1)”; it cannot be limited to the examples disclosed herein and it is essentially according to the claims.

CLAIMS

1. A system (1) enabling parties to perform data share such as image, video, location information, contact information, text with each other during calls to be established over global system for mobile communications (GSM) network; **comprising:**
- 5 at least one mobile device (3) which can run applications such as the call application (2) essentially enabling to establish network over global system for mobile communications (GSM) network, maintain the established calls, end the established calls and receive incoming calls on thereof;
- 10 **and characterized by:**
- at least one data transfer application (4) which runs on the mobile device (3), enables the user to make data selection from the applications running on the mobile device (3) so as to be sent to the other party and/or parties being involved in the call during a call established; and
- 15 at least one server of data transfer application (5) which is in communication with the data transfer application (4) by using any remote communication protocol included in the state of the art and receives the data related to the user selections received from the data transfer application (4) and sends the said data to the other party being included in the call by using a data service provided over wired or wireless communication networks.
- 20
- 25 2. A system (1) according to Claim 1, **characterized by** the mobile device (3) which is an electronic device such as smart phone, tablet computer that can essentially run at least one application on itself; has at least one display that enables menus of the applications running on thereof to be displayed and at least one input unit such as touchscreen or keypad that
- 30 enables to make a choice from the menus of the applications.

3. A system (1) according to Claim 1 or 2, **characterized by** the mobile device (3) on which there are a gallery application wherein media such as picture, image, and video are recorded; an address book wherein contact information of the person desired to be communicated are recorded; a
5 location detection application which enables to detect instant location; a notepad which enables users to write text.
4. A system (1) according to any of the preceding claims, **characterized by** the data transfer application (4) which runs on the mobile device (3) and it
10 enables to make data exchange between the mobile devices (3) having the data transfer application (4) during a call established by the mobile device (2).
5. A system (1) according to any of the preceding claims, **characterized by**
15 the data transfer application (4) which starts running depending on the user's request.
6. A system (1) according to Claim 5, **characterized by** the data transfer application (4) which ensures that the call desired to be established by the
20 user by the call application (2) is established over the global system for mobile communications network by triggering the call application (2) when a call is desired to be established by a user.
7. A system (1) according to any of Claim 1 to 4, **characterized by** the data
25 transfer application (4) which starts running upon being triggered by the call application (2) when it is requested to establish call over the call application (2) or receive the incoming call by the user.
8. A system (1) according to any of Claim 1 to 4, **characterized by** the data
30 transfer application (4) which starts running during the call established

upon being triggered by the data coming from the server of data transfer application (5).

- 5 9. A system (1) according to any of Claim 1 to 4, **characterized by** the data transfer application (4) which starts running depending on the user's request during the established call.
- 10 10. A system (1) according to any of the preceding claims, **characterized by** the data transfer application (4) which communicates with other applications located on the mobile device (3) and allows the user to make choice from the said applications during a call established, after it starts running.
- 15 11. A system (1) according to any of the preceding claims, **characterized by** the data transfer application (4) which sends the data chosen from the other applications by the user to the server of data transfer application (5) by using a data service provided over wired and wireless communication networks.
- 20 12. A system (1) according to Claim 11, **characterized by** the data transfer application (4) which sends the data chosen from the other applications by the user to the server of data transfer application (5) by connecting to Internet by means of a data service provided over mobile networks of a type such as 3G, LTE, etc.
- 25 13. A system (1) according to Claim 11, **characterized by** the data transfer application (4) which sends the data chosen from the other applications by the user to the server of data transfer application (5) by connecting to Internet over wi-fi or Ethernet.

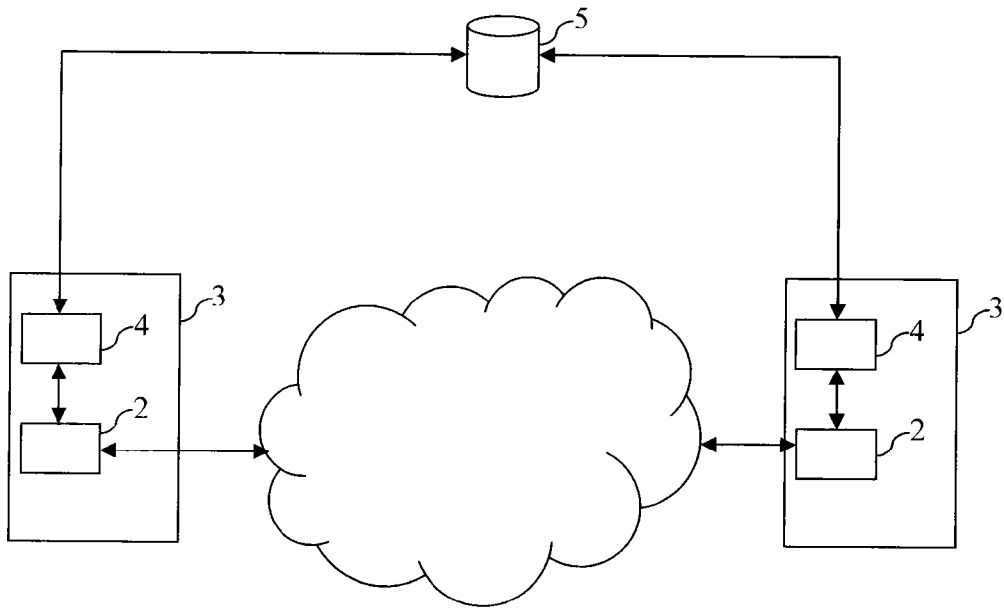
30

14. A system (1) according to any of the preceding claims, **characterized by** the server of data transfer application (5) which is in communication with the data transfer application (4) running on the mobile devices (2) and takes the data received from the data transfer application (4) located on a mobile device (3) and sends the said data to the data transfer application (4) located on another mobile device (3) whereto the said data are desired to be sent.
15. A system (1) according to any of the preceding claims, **characterized by** the server of data transfer application (5) which receives the data coming from the data transfer application (4) by using a data service provided over wired and wireless communication networks and sends the received data to the data transfer application (4) located on another mobile device (3) by using a data service provided over wired and wireless communication networks.
16. A system (1) according Claim 15, **characterized by** the server of data transfer application (5) which receives data from the data transfer application (4) by connecting to Internet by means of a data service provided over mobile networks of a type such as 3G, LTE, etc. and sends them.
17. A system (1) according Claim 15, **characterized by** the server of data transfer application (5) which receives data from the data transfer application (4) by connecting to Internet by means of a data service provided over wi-fi or Ethernet and sends them.
18. A system (1) according to any of the preceding claims, **characterized by** the data transfer application (4) which enables the user to be warned vocally and/or visually when a data is received from the server of data

transfer application (5) depending on the hardware of the user's mobile device (3) installed.

5 **19.** A system (1) according to any of the preceding claims, **characterized by**
the data transfer application (4) which enables the user of the mobile
device (3) sending the data to be informed about the fact that the data is
viewed in writing and/or vocally and/or visually after the data sent to a
mobile device (3) over the server of data transfer application (5) is seen by
the user of the said mobile device (3) depending on the hardware of the
10 user's mobile device (3) installed.

Figure 1



INTERNATIONAL SEARCH REPORT

International application No
PCT/TR2016/000047

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04M1/725
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/146256 A1 (HAWKINS JEFFREY CHARLES [US] ET AL) 19 June 2008 (2008-06-19) paragraphs [0024] - [0045], [0050] - [0053], [0064]; figures 1,2,4,6,7 -----	1-19
X	US 2013/136076 A1 (MCNAMARA JUSTIN MICHAEL [US] ET AL) 30 May 2013 (2013-05-30) paragraphs [0010] - [0012], [0021] - [0032]; figures 1-4 -----	1-19
X	US 2006/099988 A1 (VELAGALETI PRASHANT R [US] ET AL) 11 May 2006 (2006-05-11) paragraphs [0034] - [0043], [0063] - [0071]; figures 1,5,6 -----	1-19

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

13 September 2016

Date of mailing of the international search report

21/09/2016

Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Kanlis, Angelos

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/TR2016/000047

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008146256	A1	19-06-2008	NONE

US 2013136076	A1	30-05-2013	US 2008096544 A1 24-04-2008
			US 2012076094 A1 29-03-2012
			US 2013136076 A1 30-05-2013
			WO 2008051729 A2 02-05-2008

US 2006099988	A1	11-05-2006	NONE
