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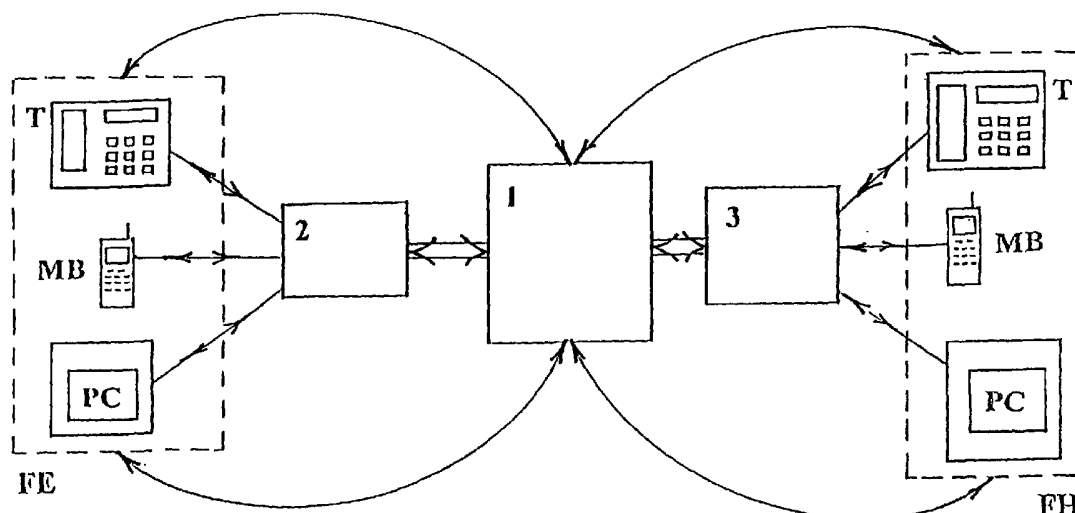
(43) International Publication Date
11 March 2004 (11.03.2004)

PCT

(10) International Publication Number
WO 2004/021666 A1

- (51) International Patent Classification⁷: **H04L 29/06**, H04Q 7/22, H04M 3/487
- (21) International Application Number: PCT/HU2002/000126
- (22) International Filing Date: 19 November 2002 (19.11.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: P0202910 30 August 2002 (30.08.2002) HU
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PROCEDURE FOR OPERATING AN ADVERTISING AND INFORMATION SYSTEM



(57) Abstract: The invention relates to a procedure for operating an advertising and information system in a telecommunication network, which is suitable for sending and retrieving advertisements and information preferably making use of SMS messages. During the procedure according to the invention information is sent to a central store, where it is electronically stored and retrieved. The procedure according to the invention is characterized by that, sending of information to the central store takes place from the side of the remitter electronically by phone, preferably by mobile phone, by SMS message as a text and/or a picture, or as a spoken message to a particular phone number given beforehand (an SMS number), and the information obtained this way is electronically stored and retrieval of the information from the central store takes place on basis of an electronically coded search question sent from the user's side by phone, preferably by a mobile phone, by an SMS message or by e-mail.

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Procedure for operating an advertising and information system

The invention relates to a procedure for operating an advertising and information system in a telecommunication network, which is suitable for sending and retrieving advertisements and information preferably making use of SMS messages.

Development of technical devices provides more and more possibilities for sending and searching various aimed information. Due to the permanent development of mobile phones, a new form of sending and receiving electronic messages, the SMS message has been recently developed, the use of which is becoming easier with the development of technology. The SMS message is a digitally coded information, which contains letter and number characters and different signs, respectively the technical possibility is available for sending and forwarding picture messages and it is getting to spread as well. There are also technical conditions for linking of the Internet with mobile phones, so that an SMS message sent by a mobile phone can be transmitted on the Internet in the form of an e-mail, respectively it is also possible to send an SMS to mobile phones from a PC linked with the Internet. There is also a trend in fixed telephone systems to send and receive spoken messages. The above mentioned links and the accelerating development will make possible the electronic forwarding of moving pictures in the not too distant future.

The utility model HU U 1963 describes a connecting arrangement in the telecommunication system in the state of art. In this arrangement the subscriber's equipment is connected to the telephone switchboard through the telecommunication system and this connecting arrangement makes possible sending and receiving of advertisement by SMS. It is characterized by that the subscriber's equipment is connected with a store unit serving for recording and retrieving advertisements. The solution described here may make possible sending and receiving advertisements by SMS but suffers from one or more limitations for giving instructions how to form and operate a complex advertising and information system.

We aimed to work out a solution according to the invention which is suitable for setting up and operating a complex advertising and information system, in which putting up, sending, moreover retrieving and receiving advertisements on mobile or fixed phone systems, respectively sending electronic messages through computer systems take place preferably in the form of SMS messages.

When working out the solution according to the invention we realized, that in case sending of information to the central store takes place electronically by phone, preferably by a mobile phone by the sender as an SMS message as a text and/or as a picture, or in the form of spoken message to a phone number (SMS number) given beforehand, then the received information is electronically stored in the central store, and the retrieval of the information from the central store takes place on basis of an electronically coded search question sent by the user's side by phone,

preferably by mobile phone, by SMS message or e-mail, then the set aim can be achieved.

The invention relates to a procedure for operating an advertising and information system in telecommunication networks during which information is sent to a central store, where it is electronically stored and retrieved. The procedure is characterized by that, sending of information to the central store takes place from the side of the remitter electronically by phone, preferably by mobile phone, by SMS message as a text and/or a picture, or as a spoken message to a particular phone number given beforehand (an SMS number), and the information obtained this way is electronically stored and retrieval of the information from the central store takes place on basis of an electronically coded search question sent from the user's side by phone, preferably by a mobile phone, by an SMS message or by e-mail.

In case of one of the preferred applications of the procedure according to the invention the information sent to the central database is stored according to the method described earlier preferably for a determined period of time depending on the topic or the fee.

In case of another preferred application of the procedure according to the invention the system selects the relevant information on basis of the search question and sends back all the information available for the given code, in given case the network sends the information stored electronically together with an advertisement to the enquirer, in given case sends the information in the form of a text, (SMS, e-mail) furthermore a spoken message and/or a picture.

In case of a further preferred application of the procedure according to the invention the system automatically finds the relevant advertisement in the demand-supply field of the database, finds the matching pair, in given case automatically provides feedback to the given number.

In case of a further preferred application of the procedure according to the invention the retrieval of data is also possible by fax, within the frame of a fax system database.

In case of another preferred application of the procedure according to the invention the retrieval of data takes place within the frame of a voicemail system, when the obtained messages, advertisements are sent back as spoken messages, respectively the texts sent in digital forms as SMS are simply read by the telephone voice.

In case of another preferred application of the procedure according to the invention is an additional technique of sending the advertising message, that the advertiser sends the advertisement in the form of a simple spoken message, which is processed by the system and recorded in a digital form, and searching and data processing take place in a similar way as in case of advertisements sent by SMS, and during

retrieving of advertisements the system plays back this spoken message to the enquirer or sends it back in the form of an SMS text.

In case of another preferred application of the procedure according to the invention the data providers send lists of products and services electronically e.g. by Internet, by telephone to the central database preferably indicating prices, addresses and other information, which are stored in the central database, then the stored data can be retrieved by the enquirers via a given SMS number and the system selects the data matching with the required product or service in the central database on basis of the search question received by SMS or by any other electronical way and sends the reply with the information regarding the given product or service back to the enquirer.

In a possible preferred application of the procedure according to the invention two different telephone numbers (SMS numbers) are used, one of them is used for placing, registering the advertisements sent or to be forwarded, the other number is used for retrieving, editing and reading back of same.

In case of another possible preferred application of the procedure according to the invention one telephone number is used both for sending, registering and retrieving the advertisements and the suitable form is selected either on basis of codes or on basis of instructions given by the centre.

In case of using two telephone numbers the process of putting up an advertisement is as follows:

The client, the sender, who wants to put up an advertisement sends the text of the advertisement in the form of an SMS to an SMS number given beforehand. The client is given a feedback from the system confirming receipt of the advertisement by the system and is also given an indication of the time until the text of the advertisement is stored by the system.

There is a central store receiving the message in the central unit of the system, which receives and stores the in-coming advertising messages, texts. All data, information sent or retrieved by SMS or on the Internet or by e-mail are considered advertising messages.

Storing of advertising messages can be accumulated or organized into sections.

- In case of storing in section the system selects or places the advertisements on basis of keywords into different sections. In given case one advertisement can be placed into several sections on basis of various keywords. In case of retrieving search can take place on basis of the keyword in the whole database or in certain separate sections only.

- In case of accumulated storing the text of advertisements is stored randomly or in the order of their receipt and in case of retrieving search takes place in the whole database in given case on basis of keywords.

This way a global advertising system is created, which is not limited thematically, i.e. advertisements regarding any matter can be placed, because the database created this way can be searched thematically by the current technique.

Process of retrieval is as follows:

The enquirer sends the search question in the form of a text message to a telephone number (SMS number) given beforehand. The system subsequently sends back the answer to the search question, which is the confirmation of receipt of the search question in case of a given possible application. The enquirer does not have to send his number separately, as the system automatically transmits and displays it. In case the enquirer does not want to get the reply to his own mobile phone, then there is a possibility of giving a different phone number or e-mail address.

On basis of the search question or search word the central system selects the relevant advertisements and information from the database and sends them to the enquirer in the form of SMS and/or e-mail or any other electronic form. In a preferable case the sending of the reply SMS or reply information is possible in a given order, e.g. a bigger amount of replies, e.g. five-ten SMS replies are sent to one search question, and additional number of replies follow a subsequent question. This way the enquirer can search a bigger matching field depending on his requirements.

In a possible way of charging the customer is, that the advertiser pays a charge when placing the advertisement, which amount in given case is added to his telephone bill, or is subtracted from a given card unit. The customer shall be charged for the SMS messages sent to him. Charges are calculated preferably on basis of the number of SMS messages sent and/or received.

Procedure according to the invention will be obvious to persons skilled in the art from the enclosed figure described as follows:

Fig 1 shows the block draft of one possible preferred application of the procedure according to the invention. The central store 1 can be seen in the figure connected to the FE sender's side via transmission lines 2, 3 preferably via telephone lines. On the FE sender's side respectively on the FH user's side is located the MB mobile telephone and/or the T fixed telephon and/or PC serving the direct data input resp. data receipt. Any of the above mentioned device is suitable for sending and receiving electronically coded messages, preferably SMS messages. Distinguishing between the FE sender's side and the FH user's side is necessary from the point of view of system operating only, as the same device can function as the sending or receiving unit during the use. The transmission lines 2,3 linked with the PC unit are preferably Internet access connections however any transmission line e.g. telephone line, coaxial cable, optical cable or Internet connection without wire can be used for this purpose. The flow of information back and forth is shown by arrows in the figure.

For the application of the procedure according to the invention a telephone number (SMS number) is necessary, which is accessible via fixed and/or mobile telephone or by the Internet, where the advertiser or the client providing the information sends the text i.e. the information to be placed in the advertisement electronically. The information may consist of a text, for example advertisement or an informative announcement, which can be sent by SMS, in picture, as spoken message or on the Internet. The principal is, that the information should be sent in an electronically coded form. The information sent is stored in the way previously specified for a preferably determined time period. This period of time depends on the theme or the charge. This way a database is created in the central store, from which the enquirers and users can retrieve information interesting for them.

The enquirer may ask for information from the database and may send a search question to the database either on the SMS number the information was sent, or on another SMS number specified for this purpose.

Sending of the search question is possible in any electronic way as follows:

- by SMS,
- by e-mail,
- as a text, spoken, with words (from which an electronic or textual message is created, and handled it in the common way, as an electronic information)
- as a picture, when the corresponding identifying code should be enclosed to the search question.

The system selects the relevant information to the search question and sends back all the information matching with the given question to the enquirer. The system sends all the information to the enquirer stored electronically beside the given information, advertisement. If there is text only, (SMS, e-mail) then the text is sent, if there are both spoken message and picture, then they are sent as well. This way the enquirer can check the information sent and can store it in his mobile phone or can call the interested parties.

Additional preferred applications, further developing of the procedure according to the invention: In case of full extension of the information sent by the system, it can be an advertising information or a programme recommendation, e.g. client information, travel information. In given case with the further development of the system a picture can be attached to or retrieved with the message. With applying WAP system compatible telephones browsing in the database can also be made possible against a separate charge.

This system makes possible for anyone searching anything to find purposely the given advertisement. It is not necessary to browse through different databases. It involves as well, that in the further-developed version the system automatically finds the matching pair respectively the relevant advertisement in the demand-supply field. It is possible to launch a service which provides automatical feedback for the given number if the system finds the matching pair.

Retrieving of data is also possible in a preferred application by fax, in the frame of a fax data system. The same can be realized in the frame of a voicemail system, when the messages and advertisements are sent back as spoken messages, respectively the text sent digitally in SMS form is simply read back by the telephone.

An additional preferred application of the sending of the message is, that the advertiser sends the advertisement in the form of a simple spoken message, which is processed by the system and recorded in a digital version. Searching and data processing takes place similarly to advertisements sent in SMS forms. This application is eventually a voicemail system, which is further developed, which sends the spoken message or the SMS message to the enquirer during retrieving.

An additional preferred application of the procedure according to the invention offers possibility for handling and registering price lists, product lists and other information of products and services of producers and salesmen. The main point of it is, that the data providers send lists of products and services indicating prices, addresses and other information electronically e.g. by Internet, by telephone to the central database. The received information is stored in the central database during the procedure. The stored data can be retrieved by the enquiring clients by using an SMS number given purposely for this goal according to the procedure according to the invention. This way the aim can be achieved, that on basis of the search question sent by SMS or any other electronic way the system selects the data relevant to the required product or service and sends the reply with the information relevant to the given product or service in accordance with the function of the system. This way in a preferred application of the procedure according to the invention a list of products and services is created digitally, which includes what products and services are where, and at what prices available.

The preferred application of the procedure according to the invention offers the advantage, that it has all the advantages of the mobile telephone network, it is mobile, not fixed, can be accessed any time from anywhere. The data are registered in the database immediately both when placing and retrieving the advertisement, so the database is always actual. The advantage of the system is, that it is fast, information regarding both demand and supply is immediately recorded in the database, can be promptly retrieved and searched. The aim of the advertisement can be achieved within minutes.

The preferred application of the procedure according to the invention extends the function of the mobile phone, because it is converted into a digital interactive advertising newspaper. The data of the retrieved SMS advertisements can be stored in the memory of the mobile phone and they can be immediately called. In case of another preferred application of the procedure according to the invention the system can function as an advertising directory. The name of the system formed by the procedure according to the invention is preferably INTERFON, which acts as an intermediary link and partners demanding anything and partners offering anything can easily and quickly find each other with the help of INTERFON.

CLAIMS

1. Procedure for operating an advertising and information system in telecommunication networks during which information is sent to a central store, where it is electronically stored and retrieved, *characterized by that*, sending of information to the central store takes place from the side of the remitter electronically by phone, preferably by mobile phone, by SMS message as a text and/or a picture, or as a spoken message to a particular phone number given beforehand (an SMS number), and the information obtained this way is electronically stored and retrieval of the information from the central store takes place on basis of an electronically coded search question sent from the user's side by phone, preferably by a mobile phone, by an SMS message or by e-mail.
2. Procedure according to claim 1, *characterized by that*, information sent to the central database is stored according to the method described earlier preferably for a determined period of time depending on the topic or the fee.
3. Procedure according to claim 1 or 2, *characterized by that*, the system selects the relevant information on basis of the search question and sends back all the information available for the given code, in given case the network sends the information stored electronically together with an advertisement to the enquirer, in given case sends the information in the form of a text, (SMS, e-mail) furthermore a spoken message and/or a picture.
4. Procedure according to any of claims 1 to 3, *characterized by that*, during the procedure the system automatically finds the relevant advertisement in the demand-supply field of the database, finds the matching pair, in given case automatically provides feedback to the given number.
5. Procedure according to any of claims 1 to 4, *characterized by that*, retrieval of data is also possible in a preferred application by fax, within the frame of a fax system database.
6. Procedure according to any of claims 1 to 5, *characterized by that*, the retrieval of data takes place within the frame of a voicemail system, when the obtained messages, advertisements are sent back as spoken messages, respectively the texts sent in digital forms as SMS are simply read by the telephone voice.
7. Procedure according to any of claims 1 to 6, *characterized by that*, an additional technique of sending the advertising message is, that the advertiser sends the advertisement in the form of a simple spoken message, which is processed by the system and recorded in a digital form, and searching and data processing take place in a similar way as in case of advertisements sent by SMS, and during retrieving of advertisements the system plays back this spoken message to the enquirer or sends it back in the form of an SMS text.

8. Procedure according to any of claims 1 to 7, *characterized by that*, data providers send lists of products and services electronically e.g. by Internet, by telephone to the central database preferably indicating prices, addresses and other information, which are stored in the central database, then the stored data can be retrieved by the enquirers via a given SMS number and the system selects the data matching with the required product or service in the central database on basis of the search question received by SMS or by any other electronical way and sends the reply with the information regarding the given product or service back to the enquirer.

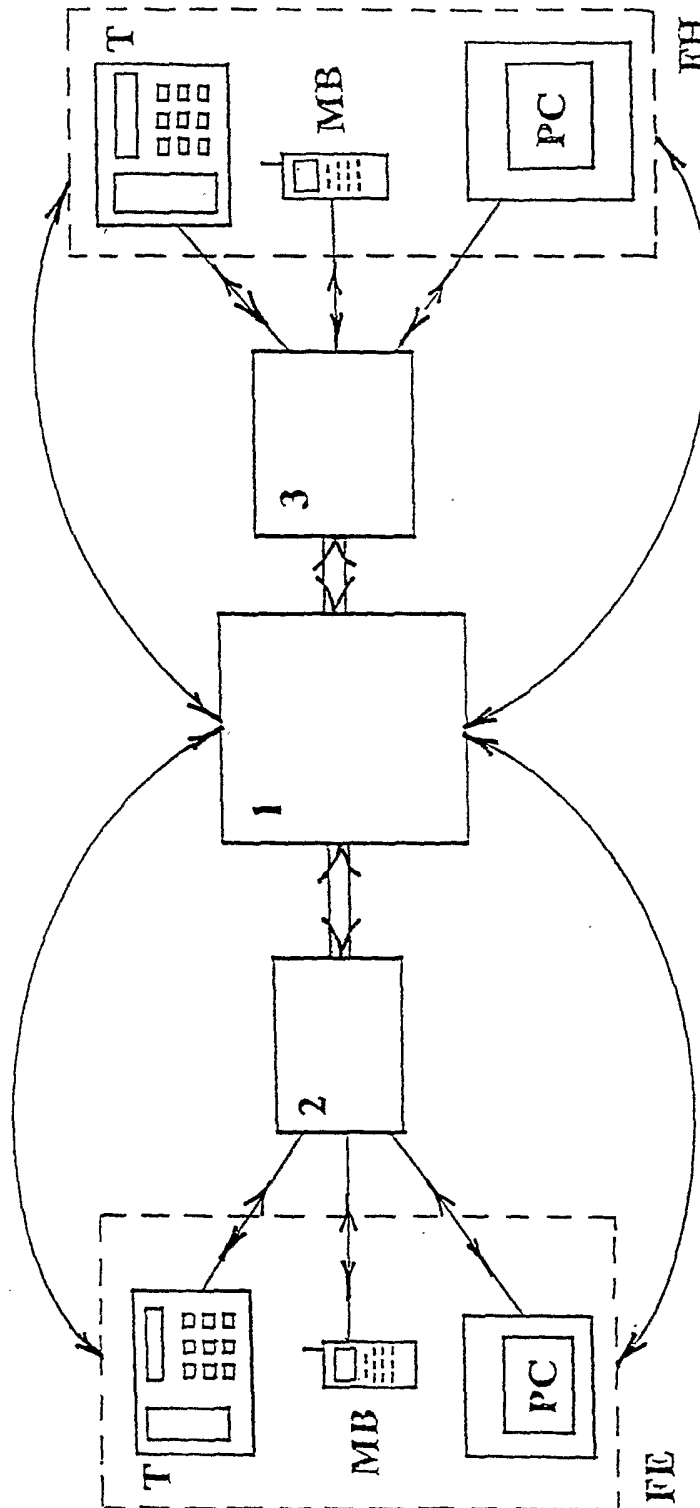


Fig. 1

INTERNATIONAL SEARCH REPORT

 Int'l Application No
 PCT/HU 02/00126

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L29/06 H04Q7/22 H04M3/487		
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) IPC 7 H04L H04Q 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 practical, search terms used) EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	--- ---	2,4-8
Y	US 5 283 731 A (LALONDE JAMES E ET AL) 1 February 1994 (1994-02-01) abstract; figures 1,6 column 2, line 3-27 column 4, line 24-65 column 5, line 18-37 column 8, line 10-53 ---	4-7
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
<ul style="list-style-type: none"> *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document 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 7 May 2003		Date of mailing of the international search report 13/05/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Lopez Monclus, I.

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