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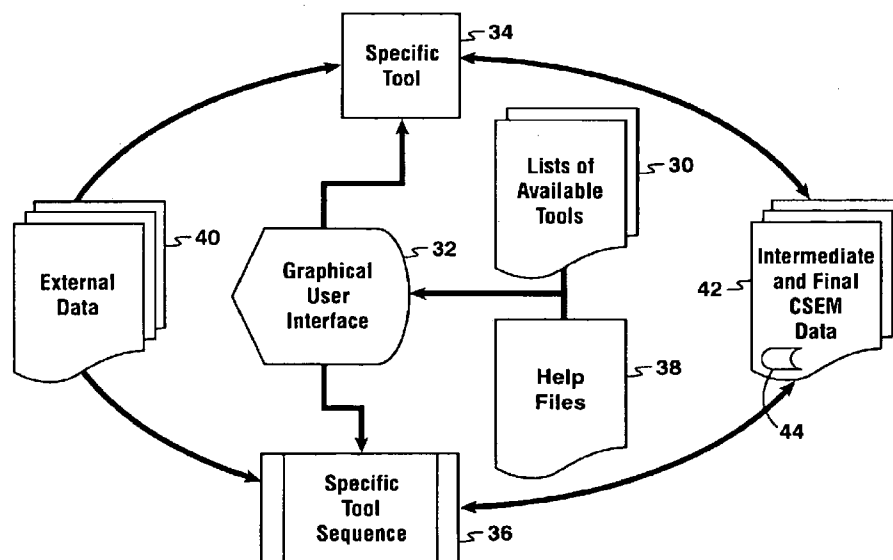
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: ELECTROMAGNETIC DATA PROCESSING SYSTEM



(57) Abstract: Method and computer program for accepting controlled-source electromagnetic ("CSEM") source and receiver data (40) as time series, transforming these data into the time-frequency domain, and reducing these data and survey metadata to a form suitable for interpretation or inversion. The invention includes: a number of processing tools or programs (30), each designed to take a specific action on CSEM data or metadata, combine data types in some way, and/or provide a visual representation of data; a Graphical User Interface (32) to specify the action of specific tools (34) on specific data, supply parameters to tools, and monitor progress of the processing project; and a specified common internal data format, so that processing tools may be applied in various orders (36) during different processing flows and processed CSEM data can be passed on to interpretation or inversion systems.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G01V 1/00, 1/28; G06F 19/00 (2007.10)

USPC - 702/16

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)

USPC: 702/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 175/40,50; 324/323,326,329-331,337,345; 342/22; 702/13 (see terms below)

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

PubWEST(PGPB,USPT,USOC,EPAB,JPAB), GOOGLE SCHOLAR

terms: controlled source electromagnetic, subterranean, spectral, time, resistivity, graphical user interface, processing, filter, hydrocarbon, strata, wavelet denoising, history, drill, common-receiver, common-source, marine, seafloor, power interruption.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2005/0251340 A1 (Tompkins) 10 November 2005 (10.11.2005), entire document, especially fig. 1-2, [0009], [0017]-[0022], [0039]-[0049], [0058]-[0077], [0082]-[0087], [0097]-[0104], and [0130]-[0132].	1-4, 6-12, 16-18 ----- 5, 13-15
Y	US 6,754,890 B1 (Berry et al.) 22 June 2004 (22.06.2004), col 26, ln 10-45.	5
Y	US 6,907,348 B2 (Gaston et al.) 14 June 2005 (14.06.2005), fig. 4b and col 9, ln 21-32.	13-15

☐ Further documents are listed in the continuation of Box C.

* 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

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"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

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