

Search history

Search (IC = G01N29/24 OR G01N29/265) AND (PD<20160901) (Results 10686)
1:

Search 1 AND (FT = ((apparatus OR device) W4 pipe*) NEAR characteristic*) (Results 0)
2:

Search 1 AND (FT = ((apparatus OR device) W4 characteristic*) AND pipe) (Results 29)
3:

Search 3 AND (FT = inertia AND (metal OR magnet*)) (Results 1)
4:

Search 1 AND (FT = ((apparatus OR device) W8 (characteristic* OR feature*)) AND pipe) (Results 73)
5:

Search 5 AND (FT = (inertia OR gyro*) AND (metal OR magnet*)) (Results 5)
6:

Search 1 AND (FT = ((apparatus OR device) W8 (characteristic* OR feature OR inspect*)) AND pipe) (Results 243)
7:

Search 7 AND (FT = (inertia OR gyro*) AND (metal OR magnet*)) (Results 9)
8:

Search fn=(28142774 or 29611226 or 29492949 or 28214049 or 59685164 or 41560600 or 28516216 or 31937340 or 1101881 or 29433175 or 29433175 or 124423 or 1519678 or 1431286 or 2209828 or 3015866 or 28669289 or 4928429 or 3816307 or 8410382 or 11560271 or 12816295 or 10171648 or 12056077 or 11325523 or 15417716 or 23525639 or 23922073 or 28117047 or 32795078 or 31484095 or 30147068 or 34171021 or 31485831 or 33432812 or 43624353) (Results 35)
9:

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10:

Search 10 AND (FT = inertia* OR gyro* OR accel*) (Results 17)
11:

Title: **Accelerometer** pig

Abstract: A pipeline pig adapted to carry inspection components to determine flaws in a pipeline wall arising from corrosion, pitting, gouges, hard spots, scratches, metallurgical anomalies and dents causing out of round conditions is equipped with an **accelerometer**. The **accelerometer** is adapted to provide an **electrical** signal indicative of **acceleration** and deceleration in the direction parallel to the axis of the pipeline. By correlation of signals recorded by the flaw detection equipment with signals recorded from the **accelerometer**, dents may be readily identified.

Classifications:

International (IPC 8-9): G01B5/28 G01B7/16 G01B7/28 G01B7/34 G01M3/00 G01M3/02 G01M3/40 G01N19/08 G01N27/90 G01P1/12 G01P15/08 (Advanced/Invention);

G01M3/02 (Advanced/Non-invention);

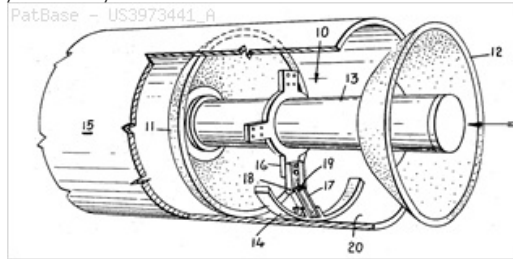
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International (IPC 1-7): F16L1/00 F16L55/00 F16L55/18 F17D5/00 F17D5/02 G01B17/00 G01B5/28 G01B7/16 G01B7/34 G01D21/02 G01L7/00 G01M3/00 G01M3/40 G01N19/08 G01N27/72 G01N27/82 G01P15/08 G01P15/12

CPC: F16L2101/30 G01B7/16 G01B7/282 G01B7/34 G01M3/005 G01N27/902 G01N27/9093 G01P1/127 G01P15/08

European: G01B7/16 G01B7/28C G01B7/34 G01M3/00C G01N27/90A1B G01N27/90F G01P1/12C G01P15/08 G01P19/12 R16L101/30

US: 73/105 73/432R 73/866.5



Family:

Publication number	Publication date	Application number	Application date
AU197610726 A1	19770811	AU19760010726	19760202
CA1035019 A1	19780718	CA19750239395	19751112
DE2556659 A1	19770526	DE19752556659	19751216
DK142381 B	19801020	DK19750005544	19751208
DK142381 C	19810316	DK19750005544	19751208
DK554475 A	19770513	DK19750005544	19751208
FR2331744 A1	19770610	FR19750037185	19751204
FR2331744 B1	19821008	FR19750037185	19751204
GB1508261 A	19780419	GB19760008043	19760301
IE41942 B	19800507	IE19750002513	19751118
IE41942 L	19770512	IE19750002513	19751118
JP1067123 C3	19810930	JP19760003262	19760116
JP52060682 A2	19770519	JP19760003262	19760116
JP56011102 B4	19810312	JP19760003262	19760116
NL167021 B	19810515	NL19760001149	19760205
NL167021 C	19811015	NL19760001149	19760205
NL7601149 A	19770516	NL19760001149	19760205
NO145487 B	19811221	NO19750004370	19751223
NO145487 C	19820331	NO19750004370	19751223
NO754370 A	19770513	NO19750004370	19751223
US3973441 A	19760810	US19750631934	19751114

Priority:

CA19750239395 19751112

Probable Assignee: TRANS CANADA PIPELINES LTD

Assignee(s): (std): TRANS CANADA PIPELINES LTD

Assignee(s): TRANSCANADA PIPELINES LIMITED ; TRANSCANADA PIPELINES LIMITED TE TORONTO CANADA ; TRANSCANADA PIPELINES LIMITED TORONTO CANADA ; TRANSCANADA PIPELINES LTD ; TRANSCANADA PIPELINES LTD ; TRANSCANADA PIPELINES LTD TE TORONTO CANADA ; PORTER PATRICK C ; TORANSUKANADA PAIPURAINZU LTD ; TRANS CANADA PIPE LINES LIMITED ; TRANS CANADA PIPE LINES LTD ; TRANS CANADA PIPELINE LTD ; TRANS CANADA PIPELINES LIMITED

Inventor(s): (std): PORTER PATRICK C ; PORTER PATRICK CHARLES ; PORTER P C ; PATORITSUKU CHIYAARUSU POOTAA

Inventor(s): PATRICK C PORTER ; PATRICK CHARLES PORTER TE REXDALE ; CANADA ; PATRICK CHARLES PORTER ; C PORTER PATRICK

Title: Method of and apparatus for mining analysis

Abstract: In the analysis of rock ahead of a working face a probe is pushed along a borehole formed in any desired direction in the rock and data produced by the probe is logged for later analysis, or for in-situ analysis. The probe may produce multiple logs. The data logged includes lithological information on the rock and the angular direction of the borehole. The presence of fluids, such as noxious gases, in the borehole can simultaneously be detected.

Classifications:

International (IPC 8-9): E21B17/00 E21B17/20 E21B19/083
E21B19/22 E21B23/08 E21B47/00 E21B47/04 E21B49/08 E21C39/00
G01N23/00 G01V1/40 G01V3/18 G01V5/04 (Advanced/Invention);
G01N23/00 G01V1/40 (Advanced/Non-invention);
G01C G01V (Subclass/Invention)

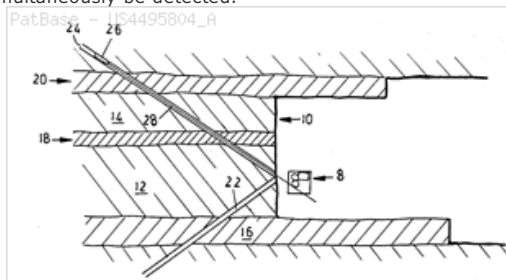
International (IPC 1-7): E21B47/00 E21B47/02 E21B47/12
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G01T7/00 G01V1/40 G01V3/18 G01V5/00 G01V5/04

CPC: E21B17/00 E21B17/20 E21B19/083 E21B19/22 E21B23/08
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European: E21B17/00 E21B17/20 E21B19/083 E21B19/22

E21B23/08 E21B47/00 E21B47/04 E21B49/08 E21C39/00

US: 175/50 299/1.05 340/854.6 73/152.02 73/152.55 73/866.5



Family:

Publication number	Publication date	Application number	Application date
AU198280472 A1	19820826	AU19820080472	19820215
CA1188364 A1	19850604	CA19820396404	19820216
DE3205707 A1	19820916	DE19823205707	19820217
ES509634 A0	19830616	ES19820509634	19820216
ES8306826 A1	19830616	ES19820509634	19820216
FR2500051 A1	19820820	FR19820002583	19820217
FR2500051 B3	19840106	FR19820002583	19820217
GB2094375 A1	19820915	GB19820004213	19820212
JP58073885 A2	19830504	JP19820022926	19820217
SE8200910 A	19820818	SE19820000910D	19820216
SE8200910 L	19820818	SE19820000910	19820216
US4495804 A	19850129	US19820348954	19820216
ZA8200866 A	19830223	ZA19820000866	19820211

Priority:

ZA19810001035 19810217 ZA19820000866 19820211 CA19820396404 19820216

Probable Assignee: GRATHNAIL DEV CO LTD

Assignee(s): (std): GRATHNAIL DEV CO LTD ; GURASUNEIRU DEV CO LTD ; LE BLANC SMITH G

Assignee(s): LE BLANC SMITH GUY ; HOWARD DERIK ; GRATHNAIL DEVELOPMENT CO LTD ; GRATHNAIL DEVELOPMENT CY LTD ; GRATHNAIL DEVELOPMENT COMPANY LIMITED

Inventor(s): (std): GAI RU BURANKU SUMISU ; HOWARD D ; LE BLANC SMITH G ; LE BLANC SMITH GUY ; SMITH GUY LE BLANC ; HOWARD DERIK ; DERITSUKU HAWAADO

Inventor(s): G LE BLANC SMITH ; D HOWARD ; GUY LE BLANC SMITH ET DERIK HOWARD ; GUY LE BLANC SMITH ; DERIK HOWARD

Agent(s): SPRUSON AND FERGUSON; BERESKIN AND PARR

Title: Apparatus and method for inertial measurement of pipeline deflection

Abstract: Apparatus and a method for detecting deflections along the length of a pipeline. A plurality of measurements of inertial attitude are made along the length of the pipeline over time by means of apparatus, including sensors, associated with a pipeline pig. Thereafter, by comparing a time sequence of such measurements, points of flexure are accurately located and identified.

Classifications:

International (IPC 8-9): G01B5/20 G01C21/16 (Advanced/Invention); G01C21/10 (Core/Invention)

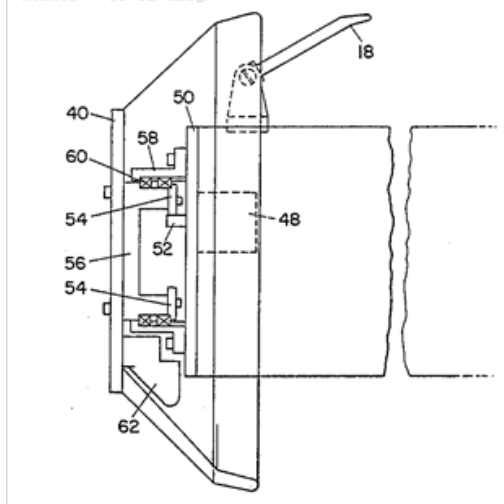
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CPC: G01C21/16

European: G01C21/16

US: 33/178F 33/302 33/312 33/313 33/544.2 333/120

PatBase - US4524526_A



Family:

Publication number	Publication date	Application number	Application date
CA1199169 A1	19860114	CA19830437088	19830920
DE3342145 A1	19840524	DE19833342145	19831122
FR2536533 A1	19840525	FR19830018481	19831121
GB2130721 A1	19840606	GB19830029589	19831104
GB2130721 B2	19870128	GB19830029589	19831104
GB8329589 A0	19831207	GB19830029589	19831104
US4524526 A	19850625	US19820443481	19821122

Priority:

US19820443481 19821122

CA19830437088 19830920

Probable Assignee:

LITTON SYSTEMS INC

Assignee(s): (std):

LITTON SYSTEMS INC

Assignee(s):

LEVINE SEYMOUR

Inventor(s): (std):

LEVINE SEYMOUR

Inventor(s):

SEYMOUR LEVINE

Agent(s):

MACRAE AND CO

Title: Pipe pig with running gear

Abstract: A pipe pig for traveling through a pipe line is supported on and moved by two or three runners, which also can move circumferentially on the inside of the pipe to alter the angular position of the runners with respect to the longitudinal axis of the pipe. In this way the runners, which support the pipe pig by contact with the inside surface of the pipe, may rotate so as to avoid obstructions as they are encountered. Such obstructions may take the forms of openings in the pipe wall or protrusions into the pipe from the pipe wall. Various devices may be used to detect the presence of such obstacles and to detect both the axial position and angular orientation of the pig within the pipe. The apparatus for changing the angular position of the runners may be integrated with or separate from the apparatus for moving the pig axially in the pipe.

Classifications:

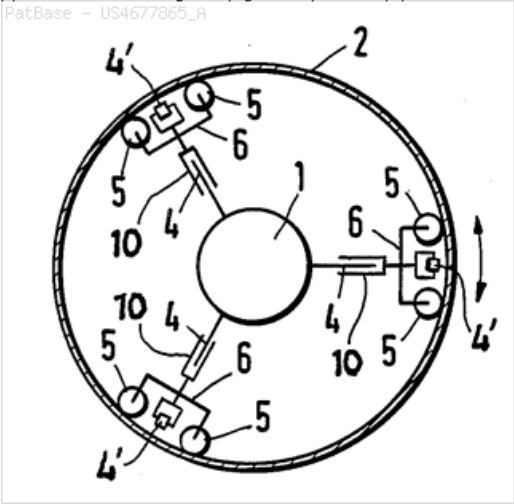
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International (IPC 1-7): B08B9/02 B08B9/04 B08B9/04 F17D5/00 F17D5/00 G01D21/00 G01M19/00 G01M3/00 G01N21/84 G01N21/88 G01N29/04 G01N29/26

CPC: F16L55/30 B08B9/049

European: B08B9/049 F16L55/30

US: 104/138.2 33/302 348/84 358/100 378/60 73/866.5 738/665



Family:

Publication number	Publication date	Application number	Application date
DE3419683 A1	19851128	DE19843419683	19840524
DE3419683 C2	19880526	DE19843419683	19840524
DE3564739 D1	19881006	DE19853564739	19850219
EP0170609 A1	19860205	EP19850730026	19850219
EP0170609 B1	19880831	EP19850730026	19850219
JP1794431 C3	19931014	JP19850048096	19850311
JP4079416 B4	19921215	JP19850048096	19850311
JP60252260 A2	19851212	JP19850048096	19850311
US4677865 A	19870707	US19850726778	19850424

Priority:

DE19843419683 19840524 DE19853564739 19850219

Probable Assignee: MANNESMANN AG

Assignee(s): (std): MANNESMANN AG

Assignee(s): MANNESMANN AG 4000 DUESSELDORF DE ; MANNESMANN AKTIENGESELLSCHAFT

Inventor(s): (std): LEHMANN PETER ; PEETAA REEMAN ; LEHMANN PETER DIPL ING

Designated states: DE FR GB IT NL

Title: INERTIAL BASED PIPELINE MONITORING SYSTEM

Abstract: A pipeline monitoring system for determining profile, ovality and displacement of oil, gas and products pipelines. The system comprises one or more pig carriers housing a plurality of sensors including a strapdown inertial measurement system, a secondary sonar measurement system, digital recorder, weld detector and odometer. The inertial measurement system detects primary **acceleration** and orientation data of the monitoring system within a pipeline and the secondary system generates redundant data for verifying the **acceleration** orientation information provided by the inertial system. The digital recorder records all of the information generated by the various measurement systems and sensors for post ash processing analysis to determine the aforementioned features of profile, ovality and displacement of pipelines.

Classifications:

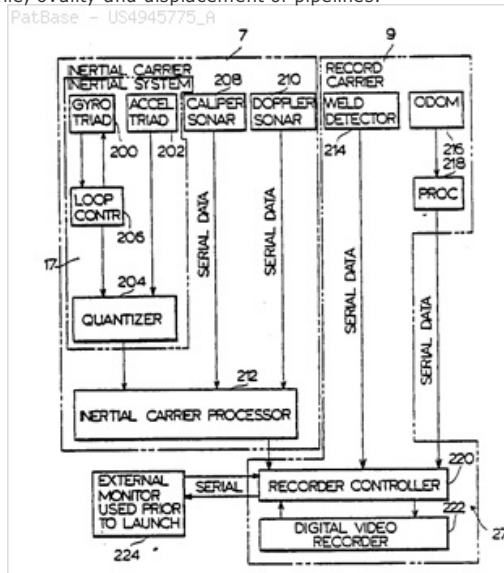
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G01B21/20 G01C22/00 G01C23/00 G01N29/04 G01N29/07
G01N29/26 G01P1/04 G01P1/12 G01P15/02 G01P5/00 G01P9/00
G01S15/58 G01S15/88 (Advanced/Invention);
E21B47/00 (Advanced/Non-invention)

International (ipc 1-7): F17D5/00 G01B17/02 G01B21/20
G01C21/16 G01C23/00 G01C9/06 G01N29/10 G01N29/26 G01P1/04
G01P1/12 G01P15/02 G01P5/00 G01P9/00

CPC: E21B47/00 E21B47/022 E21B47/124 F16L55/26 G01N29/07
G01N2291/02854 G01N2291/02872 G01N2291/044

European: E21B47/00 E21B47/022 E21B47/12S F16L55/26
G01N29/07 S01N291/028L S01N291/028P S01N291/044

US: 7/386.58 73/865.8

**Family:**

Publication number	Publication date	Application number	Application date
CA1327403 A1	19940301	CA19880587332	19881230
GB2226633 A1	19900704	GB19890022704	19891009
GB2226633 B2	19921007	GB19890022704	19891009
GB8922704 A0	19891122	GB19890022704	19891009
JP2226009 A2	19900907	JP19890320734	19891212
JP2851657 B2	19990127	JP19890320734	19891212
US4945775 A	19900807	US19890362504	19890607
US4945775 B1	20000502	US19890362504	19890607

Priority:

CA19880587332 19881230

Probable Assignee: BJ SERVICES CO

Assignee(s): (std): NOWSCO WELL SERVICE LTD ; PULSESEARCH CONSOLIDAT TECH ; PULSESEARCH CONSOLIDATED TECHNOL ; PARUSAAC KONSORIDEITETSUDO TEC

Assignee(s): PULSESEARCH CONSOLIDATED TECHNOLOGY LTD ; PARUSAAC KONSORIDEITETSUDO TECHNOL LTD ; PULSESEARCH CONSOLIDATED TECHNOLOGY LTD STE 700 1020 ; SMITH JIM ; PRICE PATRICK ST JOHN ; PULSESEARCH CONSOLIDATED TECHNOLOGY LTD STE 700 10201 SOUTHPORT RD SW CALGARY ALBERTA CANADA T2W 4X9 ; ADAMS JOHN R ; BJ SERVICES CANADA INC ; BJ SERVICES CO ; BJ SERVICES CO CANADA ; NOSUKO UERU SAABISU LTD ; NOWSCO ; NOWSCO FRACMASTER CO ; NOWSCO FRACMASTER LTD

Inventor(s): (std): PATORITSUKU SENTO JIYON PURAIS ; JIMU SUMISU ; JIYON AARU ADAMUSU ; PRICE PATRICK ST JOHN ; SMITH JIM ; PRICE PATRICK S J ; PRICE PATRICK S ; SMITH JIM W ; ADAMS JOHN R

Inventor(s): JIM SMITH ; PATRICK ST JOHN PRICE ; JOHN R ADAMS ; JON AARU ADAMUSU ; PATORITSUKU SENTO JON PURAISU ; PATORITSUKU SENTO JIYON PURAISU

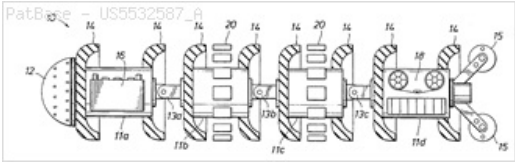
Agent(s): SIM AND MCBURNEY

Title: Magnetic field analysis method and apparatus for determining stress characteristics in a pipeline

Abstract: The apparatus of the invention is a segmented pig body having an **electrical** instrumentation subassembly mounted thereto. The subassembly consists of a plurality sensors for **electromagnetically** coupling to the inner surface of the pipeline, each of which generates a signal that varies as the localized relative permeability of the pipeline **metal**; an odometer assembly for generating correlating data; and an instrument for recording the signal and data for later analysis. The method of the invention comprises passing the pig through the pipeline while it is **electromagnetically** coupled by the sensors to the inner surface of the pipeline. During the pass, signals varying with the localized magnetic permeability of the pipeline wall and correlative data are generated and recorded. After the pass, the correlative data is used to correlate the signals to wall locations to locate stress occurrences.

Classifications:

International (IPC 8-9): G01N27/82 G01N27/90
G01V3/10 (Advanced/Invention);
G01N27/82 G01N27/90 G01V3/10 (Core/Invention)
International (IPC 1-7): G01N27/72 G01N27/82 G01R33/12
CPC: G01N27/82 G01N27/902 G01V3/104
European: G01N27/82 G01N27/90A1B G01V3/10C
US: 324/220 324/242



Family:

Publication number	Publication date	Application number	Application date
CA2085048 AA	19930617	CA19922085048	19921210
CA2085048 C	20030415	CA19922085048	19921210
US5532587 A	19960702	US19910808425	19911216

Priority:

US19910808425 19911216 CA19922085048 19921210

Probable Assignee: NDT SYSTEMS AND SERVICES AG

Assignee(s): (std): VETCO PIPELINE SERVICES INC

Assignee(s): SIMEK JAMES C ; DOWNS ROBERT W ; NDT SYSTEMS AND SERVICES AG

Inventor(s): (std): DOWNS ROBERT W ; SIMEK JAMES C

Agent(s): FINLAYSON AND SINGLEHURST

Title: Multi-directional magnetic flux pipe inspection apparatus and method

Abstract: A pipeline inspection pig includes a drive mechanism, a first field generator and first sensor section connected to the drive mechanism and is driven thereby helically through the pipeline in a clockwise rotational direction. A second field generator and second sensor section is also connected to the drive mechanism and is driven thereby helically through the pipeline in a counterclockwise direction. A data recorder is operatively connected to the first sensor section and to the second sensor section for recording field interruption data from which a plot of anomalies in the pipeline can be generated as a grid of intersecting helical sensor signal pathways of the first and second sensors.

Classifications:

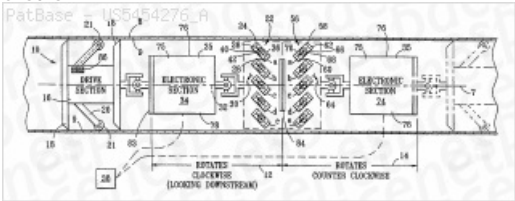
International (IPC 8-9): G01N27/82 G01N27/90 (Advanced/Invention)

International (IPC 1-7): G01M19/00 G01N27/82 G01N29/04 G01N29/26

CPC: G01N27/82 F16L55/32 G01N27/9013

European: G01N27/82 G01N27/90A1

US: 324/220 324/226 324/228 73/623 73/865.8 73/866.5



Family:

Publication number	Publication date	Application number	Application date
US5454276 A	19951003	US19930100468	19930730
US5565633 A	19961015	US19950535921	19950928

Priority:

US19930100468 19930730 US19950535921 19950928

Probable Assignee: WERNICKE TIMOTHY K

Assignee(s): (std): WERNICKE TIMOTHY K

Inventor(s): (std): WERNICKE TIMOTHY K

Title: Eddy current pipeline inspection device and method

Abstract: A pipeline inspection vehicle which can be towed through a pipeline via a cable. The vehicle includes a power unit, a master processor module, and a coil which generates an eddy current field which passes along the pipe. The resultant field is detected by a master sensor ring and slave sensor ring. Information on an amplitude and phase of the detected field together with vehicle orientation information is sent to a base station which has a computer. A distance encoder also is provided to assist in locating the position of any detected faults.

Classifications:

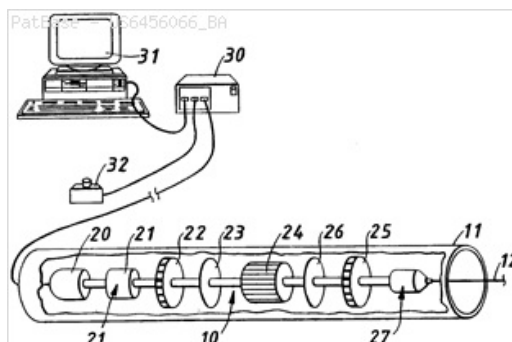
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G01N27/90 (Advanced/Non-invention);
G01N27/90 (Core/Invention)

International (IPC 1-7): G01B15/06 G01B7/00 G01N G01N27/20
G01N27/61 G01N27/90

CPC: G01N27/902 G01N27/9033

European: G01N27/90A1B

US: 324/220 324/232 324/242



Family:

Publication number	Publication date	Application number	Application date
AR016649 AA	20010725	AR1998P104466	19980908
AU199888715 A1	19990329	AU19980088715	19980824
AU731987 B2	20010412	AU19980088715	19980824
BRPI9815646 A	20021231	BR1998PI15646	19980824
CA2303153 AA	20000303	CA19982303153	19980824
CN1277674 A	20001220	CN19988010578	19980824
EP1012595 A1	20000628	EP19980940375	19980824
GB2329024 A1	19990310	GB19980018387	19980825
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GB9818387 A0	19981021	GB19980018387	19980825
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ID24764 A	20000803	ID20000000413	19980824
IL134883 A0	20010520	IL19980134883	19980824
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KR20010023726 A	20010326	KR20007002380	20000306
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NZ503358 A	20010928	NZ19980503358	19980824
PL339080 A1	20001204	PL19980339080	19980824
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Priority:

GB19970018891 19970906

GB19970018891 19970908

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Probable Assignee: LATTICE INTELLECTUAL PROPERTY LTD

Assignee(s): (std): BG TRANSCO PLC ; BRITISH GAS PLC ; BURD JOHN FERRIS ; LATTICE INTELLECTUAL PROPERTY ; BG INTELLECTUAL PTY LTD ; TRANSCO PLC ; RAMSHAW JAMES EDWARD

Assignee(s): LATTICE INTELLECTUAL PROPERTY LIMITED LONDON ; BG PLC ; LATTICE INTELLECTUAL PROPERTY LIMITED ; LATTICE INTELLECTUAL PROPERTY LTD ; BG INTELLECTUAL PROPERTY LTD

Inventor(s): (std): RAMSHAW JAMES EDWARD ; RAMSHAW J E ; RAMSHAW EDWARD ; BURD JOHN FERRIS ; BURD J F ; BUDD JOHN FERRIS

Inventor(s): JOHN FERRIS BURD ; JOHN FERRIS BUDD ; JOHN FERRIS BURD ; JAMES EDWARD RAMSHAW ; JAMES EDWARD RAMSHAW ; J F BURD ; J E RAMSHAW ; EDWARD RAMSHAW

Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP

Designated states: AT AU BE BR CA CH CN CY CZ DE DK ES FI FR GB GR HU ID IE IL IT JP KR KZ LU MC MX NL NZ PL PT RU SE SG SK UA US

Title: METHOD AND APPARATUS FOR DETERMINING LOCATION OF CHARACTERISTICS OF A PIPELINE

Abstract: A pipeline inspection and defect mapping system includes a pig having an inertial measurement unit and a pipeline inspection unit for recording pig location and defect detection events, each record time-stamped by a highly precise onboard clock. The system also includes several magloggers at precisely known locations along the pipeline, each containing a fluxgate magnetometer for detecting the passage of the pig along the pipeline and further containing a highly precise clock synchronized with the clock in the pig. The locations of the various magloggers are known in a north/east/down coordinate system through a differential global positioning satellite process. Finally, a postprocessing off-line computer system receives downloaded maglogger, inertial measurement, and odometer data and through the use of several Kalman filters, derives the location of the detected defects in the north/east/down coordinate frame. Consequently, a task of identifying sites for repair activity is much simplified.

Classifications:

International (IPC 8-9): F16L55/28 F16L55/48 F17D5/00 F17D5/02

G01C21/16 G01C21/18 G01C22/00 G01M3/00 G01N27/82

G01N29/24 G01N29/265 (Advanced/Invention);

F16L101/00 (Advanced/Non-invention);

F16L55/26 F17D5/00 G01C21/10 G01C22/00 G01N27/82 G01N29/24

G01N29/26 (Core/Invention)

International (IPC 1-7): G01B7/14 G01C19/00 G01C22/00

G01C9/00 G01M19/00 G01N27/00 G01N27/82 G01V1/0 G01V1/00

CPC: G01C21/165 G01N29/2412 G01N29/265 G01N291/0234

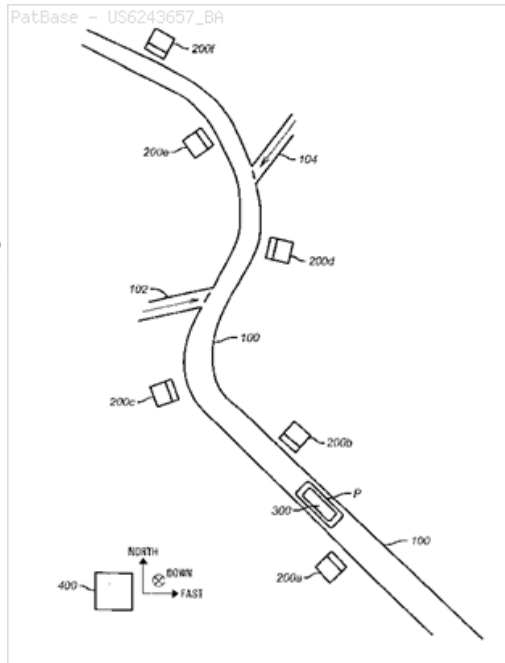
G01N291/2636

European: G01N29/24B G01N29/265 S01N291/023M S01N291/263D

US: 324/207.13 324/220 700/186 700/187 700/188 700/189 700/190

700/204 701/213 701/214 701/215 701/469 702/142 702/150

702/176 73/865.68



Family:

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Priority:

US19970996504 19971223 WO1998US27506 19981222

Probable Assignee: HONEYWELL INT INC

Assignee(s): (std): HONEYWELL INT INC ; PIPELINE INTEGRITY INT LTD ; PII NORTH AMERICA INC ; HONEYWELL INC

Assignee(s): HONEYWELL INT ; PIPELINE INTEGRITY INT INC WAS BRITISH GAS INSPECT ; TOUCHBERRY ALAN B ; IGNAGNI MARIO B ; TUCK ALAN ; PIPELINE INTEGRITY INT INC WAS BRITISH GAS INSPECTION SERVICES INC.. ; ANDERSON DONALD WILLIAM ; BRAYSON GARY ; GILMAN JAMES MICHAEL ALEXANDER ; GLEN STEPHEN JAMES ; HONEYWELL INTIONAL ; PIPELINE INTEGRITY INT ; PIPELINE INTEGRITY INTERNATIONAL INC ; HONEYWELL INTERNATIONAL INC ; PIPELINE INTEGRITY INT INC

Inventor(s): (std): ANDERSON DONALD WILLIAM ; BRAYSON GARY ; GILMAN JAMES MICHAEL ALEXANDER ; GLEN STEPHEN JAMES ; IGNAGNI MARIO B ; IGNANI MARIO B ; TOUCHBERRY ALAN B ; TUCK ALAN ; STEPHEN JAMES GLEN ; MARIO B IGNAGNI ; JAMES MICHAEL ALEXANDER GILMAN ; GARY BRAYSON ; DONALD WILLIAM ANDERSON ; ALAN TUCK ; ALAN B TOUCHBERRY

Agent(s): KIRBY EADES GALE BAKER

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW