



Re-exam

PTO/SB/57 (08-03)
Approved for use through 01/31/2004. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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(Also referred to as FORM PTO-1465)

U.S. PTO
6048
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REQUEST FOR EX PARTE REEXAMINATION TRANSMITTAL FORM

Address to:
Mail Stop Ex Parte Reexam
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

66548 U.S. PTO



01/26/04

Attorney Docket No.: 101644-11

Date: January 23, 2004

01/26/04

1. ☒ This is a request for *ex parte* reexamination pursuant to 37 CFR 1.510 of patent number 5,474,142 issued Dec. 12, 1995. The request is made by:
 - ☐ patent owner.
 - ☒ third party requester.
2. ☒ The name and address of the person requesting reexamination is:

Pason Systems Corp.

6130 3rd St. S.E.

Calgary, Alberta T2H 1K4 CANADA
3. ☐ a. A check in the amount of \$ _____ is enclosed to cover the reexamination fee, 37 CFR 1.20(c)(1);
- ☒ b. The Director is hereby authorized to charge the fee as set forth in 37 CFR 1.20(c)(1) to Deposit Account No. 501456; or
- ☐ c. Payment by credit card. Form PTO-2038 is attached.
4. ☐ Any refund should be made by ☐ check or ☒ credit to Deposit Account No. 501456. 37 CFR 1.26(c). If payment is made by credit card, refund must be to credit card account.
5. ☒ A copy of the patent to be reexamined having a double column format on one side of a separate paper is enclosed. 37 CFR 1.510(b)(4)
6. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix) or large table
7. ☐ Nucleotide and/or Amino Acid Sequence Submission
If applicable, all of the following are necessary.
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM (2 copies) or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies
8. ☐ A copy of any disclaimer, certificate of correction or reexamination certificate issued in the patent is included.
9. ☒ Reexamination of claim(s) 1, 11 is requested.
10. ☒ A copy of every patent or printed publication relied upon is submitted herewith including a listing thereof on Form PTO-1449 or equivalent.
11. ☐ An English language translation of all necessary and pertinent non-English language patents and/or printed publications is included.

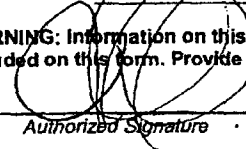
[Page 1 of 2]

This collection of information is required by 37 CFR 1.510. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Ex Parte Reexam, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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12. <input checked="" type="checkbox"/> The attached detailed request includes at least the following items:	
a. A statement identifying each substantial new question of patentability based on prior patents and printed publications. 37 CFR 1.510(b)(1) b. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited art to every claim for which reexamination is requested. 37 CFR 1.510(b)(2)	
13. <input type="checkbox"/> A proposed amendment is included (only where the patent owner is the requester). 37 CFR 1.510(e)	
14. <input type="checkbox"/> a. It is certified that a copy of this request (if filed by other than the patent owner) has been served in its entirety on the patent owner as provided in 37 CFR 1.33(c). The name and address of the party served and the date of service are: _____ _____ _____ Date of Service: _____; or <input checked="" type="checkbox"/> b. A duplicate copy is enclosed since service on patent owner was not possible.	
15. Correspondence Address: Direct all communication about the reexamination to:	
<input type="checkbox"/> Customer Number:	<div style="border: 1px solid black; width: 200px; height: 20px;"></div>
OR	
<input checked="" type="checkbox"/> Firm or Individual Name	Terry L. Leier
Address (line 1)	Blake, Cassels & Graydon LLP
Address (line 2)	45 O'Connor Street, 20th floor
City	OTTAWA
State	Ontario
Zip	K1P 1A4
Country	Canada
Telephone	(613)-788-2244
Fax	(613)-788-2247
16. <input checked="" type="checkbox"/> The patent is currently the subject of the following concurrent proceeding(s):	
<input type="checkbox"/> a. Copending reissue Application No. _____ <input type="checkbox"/> b. Copending reexamination Control No. _____ <input type="checkbox"/> c. Copending interference No. _____ <input checked="" type="checkbox"/> d. Copending litigation styled:	
Wildcat Services L.P. v. Pason Systems USA Corp.	
U.S. District Court, District of Colorado, Case # 03-M-2579	
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.	
 _____ Authorized Signature	_____ Date
Terry L. Leier	41,554
Typed/Printed Name	Registration No., if applicable
<input type="checkbox"/> For Patent Owner Requester <input checked="" type="checkbox"/> For Third Party Requester	

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Attachment to Form PTO-1465
providing information of
Pat. No. 5,474,142

Sir:

Reexamination under 35 U.S.C. 302 - 307 and 37 CFR 1.510 is requested of United States patent number 5,474,142 which issued on December 12, 1995, to Bobbie J. Bowden. This patent is still enforceable.

I. Claims for which re-examination is requested:

- Re-examination is requested of claims 1 and 11 of the Bowden patent in view of the earlier United States Patent document number 3,223,183 to Varney which is listed on attached PTO-SB42 form and of which a copy is enclosed.

II. Explanation of pertyency and manner of applying cited prior art to every claim for which re-examination is requested based on prior art:

Claims 1 and 11 of the Bowden patent is considered to be fully anticipated under 35 U.S.C. 102 by the prior art patent document to Varney.

Claims 1 and 11 are set forth below with an explanation as to how the prior art patent document to Varney meets all the recited features.

Bowden, claim 1

Bowden, claim 1	Explanation of how the prior art patent document meets all recited features
An automatic drilling system for automatically regulating the release of the drill string of a drilling rig during the drilling of a borehole, comprising:	Varney at page 1, lines 8 to 18 states his invention relates to apparatus for drilling deep boreholes in the earth. The invention is embodied in apparatus in which the drill bit is rotated by the drill string or in which the drill bit is rotated by a motor on the drill bit end of the drill string, see column 1, lines 1 to 18.
a drilling fluid pressure sensor;	In Figure 8, both elements: 110 - a pressure guage and 112 - a pressure transducer, of Varney provide apparatus to measure the drilling fluid or mud pressure

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Bowden, claim 1	Explanation of how the prior art patent document meets all recited features
a drilling fluid pressure regulator coupled to said drilling fluid pressure sensor, said drilling fluid pressure regulator measuring changes in drilling fluid pressure and outputting a signal representing those changes;	Elements 124 and 125 of figure 8 produce an electrical signal that changes with drilling fluid pressure. In addition, drilling fluid pressure signalling was also well known as described in Varney, for example, at column 2 in the paragraph extending from lines 4 to 12
a relay coupled to said drilling fluid pressure regulator, said relay responsive to the output signal of said drilling fluid pressure regulator to supply a drill string control signal at an output thereof; and	The signal produced by elements 124 and 125 pass through a signal discriminator 128 and power transformer 132 produce a signal that controls the operation of the drill string brake 134 as described in Varney at column 10 lines 3 through 25
a drill string controller coupled to said relay wherein a decrease in drilling fluid pressure results in said relay supplying a drill string control signal that operates said drill string controller to effect an increase in the rate of release of said drill string and an increase in drilling fluid pressure results in said relay supplying a drill string control signal that operates said drill string controller to effect a decrease in the rate of release of said drill string.	The signal produced by elements 124 and 125 pass through a signal discriminator 128 and power transformer 132 which control the operation of the drill string brake 134 as described in Varney at column 10 lines 3 through 25
controlling said drill string controller to increase the rate of release of said drill string when said signal represents a decrease in drilling fluid pressure and to decrease the rate of release of said drill string when said signal represents an increase in drilling fluid pressure	At column 9 lines 39 to 44 Varney states "FIG. 8 shows an automatic control system connected to the upper end of a drill string 108. A pressure gauge 110 and a pressure transducer 112 are connected to the upper end of the drill string 108 in pressure communication with the drilling fluid that is pumped into the drill string. A manner of the drill string release control effected is described in Varney at column 10 lines 3 through 25

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Bowden, claim 11	Explanation of how the prior art patent document meets all recited features
A method for automatically regulating the release of the drill string of a drilling rig drill, comprising the steps of:	Varney at page 1, lines 8 to 18 states his invention relates to apparatus for drilling deep boreholes in the earth. The invention is embodied in apparatus in which the drill bit is rotated by the drill string or in which the drill bit is rotated by a motor on the drill bit end of the drill string, see column 1, lines 1 to 18.
measuring drilling fluid pressure;	In Figure 8, both elements: 110 - a pressure guage and 112 - a pressure transducer, of Varney provide apparatus to measure the drilling fluid or mud pressure
producing a signal in response to changes in drilling fluid pressure, said signal representing the changes in drilling fluid pressure;	Elements 124 and 125 of figure 8 produce an electrical signal that changes with drilling fluid pressure. In addition, drilling fluid pressure signalling was also well-know as described in Varney, for example, at column 2 in the paragraph extending from lines 4 to 12
relaying said signal to a drill string controller; and	The signal produced by elements 124 and 125 pass through a signal discriminator 128 and power transformer 132 which control the operation of the drill string brake 134 as described in Varney at column 10 lines 3 through 25
controlling said drill string controller to increase the rate of release of said drill string when said signal represents a decrease in drilling fluid pressure and to decrease the rate of release of said drill string when said signal represents an increase in drilling fluid pressure	At column 9 lines 39 to 44 Varney states "FIG. 8 shows an automatic control system connected to the upper end of a drill string 108. A pressure guage 110 and a pressure transducer 112 are connected to the upper end of the drill string 108 in pressure communication with the drilling fluid that is pumped into the drill string. A manner of the drill string release control effected is described in Varney at column 10 lines 3 through 25

Claims 1 and 11 of the Bowden patent are considered to be unpatentable under 35 U.S.C. 103 in view of the prior art patent document to Varney and further with the teachings of Varney in view of the prior art cited during prosecution of the Bowden patent.

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III. Statement pointing out substantial new question of patentability:

With respect to claim 1 of Bowden, the teachings of Varney in US patent 3,223,183 provide an automatic drilling system for automatically regulating the release of the drill string of drilling rig during the drilling of a borehole, comprising:

- a drilling fluid pressure sensor 112;
- a drilling fluid pressure regulator 125 coupled to said drilling fluid pressure sensor, said drilling fluid pressure regulator measuring changes in drilling fluid pressure and outputting a signal representing those changes;
- a relay 128 coupled to said drilling fluid pressure regulator, said relay responsive to the output signal of said drilling fluid pressure regulator to supply a drill string control signal at an output thereof; and
- a drill string controller 132 coupled to said relay wherein a decrease in drilling fluid pressure results in said relay supplying a drilling string control signal that operates said drill string controller at 134 to effect an increase in the rate of release of said drill string and an increase in drilling fluid pressure results in said relay supplying a drill string control signal that operates at 134 said drill string controller to effect a decrease in the rate of release of said drill string."

With reference to claim 1 of Bowden, Varney provides an automatic drilling system for automatically regulating the release of the drill string of drilling rig during the drilling of a borehole, including a drilling fluid pressure sensor (pressure transducer 112 - Figure 8). The drilling fluid pressure regulator coupled to said drilling fluid pressure sensor to measure changes in drilling fluid pressure and output a signal representing those changes called for in the Bowden claim is embodied in the potentiometer resistor 125 of Varney. Varney provides a signal discriminator 128 which is responsive to the output signal of the pressure transducer which provides the relay element recited in the Bowden claim. Varney teaches a power transformer 132 to drive a drill string brake 134 which accomplishes the function of the drill string controller recited as the fourth element of the Bowden claim.

The apparatus recited by the language of claim 1 of the Bowden patent reads on the teachings of Varney. The language of claim 1 of Bowden is not drawn to the specific apparatus disclosed in the Bowden disclosure, but rather recites terms that encompass a variety of other embodiments

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of apparatus including the electrical implementations disclosed in the prior art teachings of Varney. Thus the claim is invalid for claiming what is old.

With respect to claim 11 of Bowden, the disclosure of Varney in US patent 3,223,183 teaches a method for automatically regulating the release of the drill string of a drilling rig drill, providing the steps of:

- measuring drilling fluid pressure using a drilling fluid pressure sensor 112 as shown in Figure 8 of Varney;
- producing a signal in response to changes in drilling fluid pressure, said signal representing the changes in drilling fluid pressure. In Varney, the potentiometer resistor 125 has a movable contact 124 coupled to the drilling fluid pressure sensor 124 which produces a signal responsive to changes in drilling fluid pressure representing the changes in drilling fluid pressure
- relaying the signal to a drill string controller is accomplished in Varney by supplying the output of the movable contact 124 to a signal discriminator 128 and transformer 132 that operate to control the drill string via brake 134; and
- controlling the drill string controller increase the rate of release of said drill string when said signal represents a decrease in drilling fluid pressure and to decrease the rate of release of said drill string when said signal represents an increase in drilling fluid pressure is provided in the embodiment shown in Figure 8, the operation of which is described in Varney at column 10 in the paragraph extending from line 3 through to line 25.

In applicant's amendment after final filed November 10, 1994, applicant argued for allowance of claim 7 of the patent application, which became claim 11 in the issued patent, stating that the prior art "did not disclose, teach, or fairly suggest to one of ordinary skill in the art that drilling fluid pressure may be utilized as a parameter to control the release of the drill string." The Varney publication clearly states that drilling fluid pressure is utilized as a parameter to control the release of a drill string and provides apparatus to use such a parameter to provide automatic control, which is depicted in Figure 8. The fluid pressure control solution taught by Varney is adapted to work in situations where the drill bit is rotated by rotation of the drill string itself or where a motor sits between the drill bit and the drill string.

The language of claim 11 of the Bowden patent reads on the teachings of Varney. The language of the claim 11 of Bowden is not drawn to method steps performed using the specific apparatus

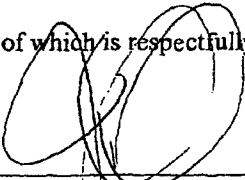
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disclosed in the Bowden disclosure, but rather recites the steps using terms that may be practised by a variety of other apparatus embodiments such as the electrical and drilling fluid pressure implementations disclosed in the prior art teachings of Varney. Thus the claim is invalid for claiming what is old.

The Varney prior art document referred to above was not of record in the prosecution file of the Bowden patent. Since claims 1 and 11 of the Bowden patent are not patentable over this prior art document, a substantial new question of patentability is raised. Further, this prior art document is closer to the subject matter of claims 1 and 11 of Bowden than any prior art that was cited during the prosecution of the Bowden patent. This prior art document provides teachings not provided during prosecution of the Bowden patent.

All of which is respectfully Submitted


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Agent for requester

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