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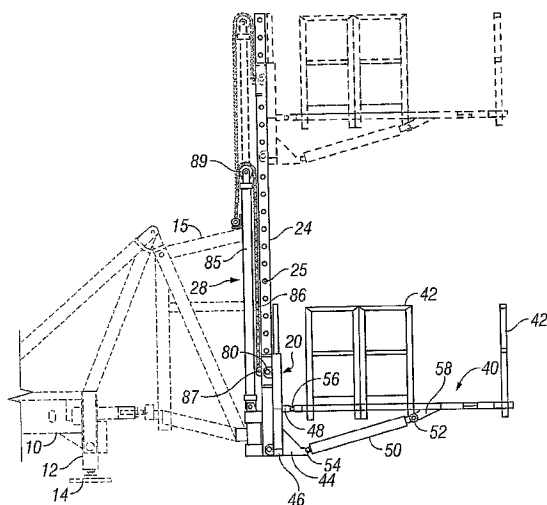
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[Continued on next page]

(54) Title: AUTOMATED WORK PLATFORM OF A MOBILE WORKOVER AND WELL-SERVICING RIG



(57) Abstract: A method and apparatus for positioning and supporting the work platform of a mobile workover rig is disclosed. The work platform of the preferred embodiment of the present invention utilizes a unique support structure and automated positioning system for positioning the work platform at the desired height above the wellhead equipment. The preferred embodiment of the present invention utilizes a specialized automated "pinning" system that secures the work platform at the desired height. Additionally, the present invention utilizes one or more support cylinders to position and support the work platform in the horizontal position over the wellhead equipment. The automated positioning and pinning system of the present invention is a unique system that significantly reduces the time required to position the work platform of a mobile workover rig in the operating position, as well as significantly reduces the risk of injury to rig personnel assisting in the positioning operations.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
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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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/24944

A. CLASSIFICATION OF SUBJECT MATTER

IPC: E21B 19/00(2006.01)

USPC: 166/75.11,85.1;414/540

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)

U.S. : 166/75.11,85.1,379,53; 414/540,541,544; 248/235,295.11,297.31,408

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3,960,360 A (ELLISTON et al) 1 June 1976 (01.06.1976), whole document, esp. Fig. 1.	1-90
A	US 6,659,707 B2 (JENSEN) 9 December 2003 (09.12.2003), whole document, esp. Fig.1A and 2A.	1-90
A	US 4,056,203 A (MELDAHL et al) 1 November 1977 (01.11.1977), whole document, esp. Fig.1 and 2.	1-90
A	US 2,284,360 A (BERBY) 26 May 1942 (26.05.1942), whole document, esp. Fig. 13.	1-90
A	US 4,071,115 A (GARCIA) 31 January 1978 (31.01.1978), whole document.	1-90
A	US 2006/0182581 A1 (MURRAY et al) 17 August 2006 (17.08.2006), whole document.	1-90
A	US 5,988,299 A (HANSEN et al) 23 November 1999 (23.11.1999), whole document.	1-90

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

"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

"E" earlier application or patent published on or after the international filing date

"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

"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)

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/24944

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
 2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
 3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

 4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
 - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/24944

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-89, drawn to an automated work platform with an automatic pinning system.

Group II, claim(s) 90, drawn to an automated work platform with a ratcheting system.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: One has an automatic pinning system while the other has a ratcheting system. These systems have differing modes of operation and different designs.

Continuation of B. FIELDS SEARCHED Item 3:
EPO, JPO, Derwent

Terms: Pinning, Ratchet, Platform