FORM PTO- Expres 06/30/99 OMB 0851-0027	1619A 01 - 05 - 1999	U.S. Department of Commerce Patent and Trademark Office PATENT					
-	28-98 100933561	HECHYED					
12.	28-90 100933561	SHEET 1998 DEC 23 FM 12: 01					
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).							
Submission	Type Conveyance Type						
X New	X Assignment	Security Agreement					
Documer		Change of Name					
Correction Reel #	n of PTO Error Frame # Merger	Other J.S. Government					
i i i i i i i i i i i i i i i i i i i	e Document (For Use ON	LY by U.S. Government Agencies)					
Conveying I		mental File Secret File					
Conveying I		es of conveying parties attached Execution Date Month Day Year					
Name (iine 1)	CARMICHAEL, Mark	12 21 98					
Name (line 2)		Execution Date					
Second Party Name (line 1)	HOWLETT, Paul	Month Day Year					
Name (line 2)							
Receiving P	arty Mark i	f additional names of receiving parties attached					
Name (line 1)	Specialised Petroleum Services Limited	If document to be recorded is an assignment and the receiving party is not					
Name (line 2)		domiciled in the United States, an appointment					
Address (line 1)	Peregrine Road	of a domestic representative is attached. (Designation must be a					
Address (line 2)	Westhill Business Park, Westhill	separate document from Assignment.)					
Address (line 3)	Aberdeenshire United Kingdom City State/County	AB32 6JL					
Domestic R	epresentative Name and Address Enter for the	e first Receiving Party only.					
Name							
Address (line 1)							
Address (line 2)							
Address (line 3)							
Address (line 4)							
/04/1999 DHGUYEN	00000192 09173258 & FOR OFFICE USE ONLY						
FC:581	40.00 OP						
Chabile based as an an	no for this collection of information is estimated to average approximately 30 minutes per Co.	rer Sheet to be recorded, including time for reviewing the document and					

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Peters and Trademark Office, Chief information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20603. See CMB Information Collection Budget Package 0651-0027, Peters and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:

Commissioner of Patents and Trademarks, Box Assignments , Washington, D.C. 20231

PATENT

FORM PTO Expires 06/30/99 OMB 0651-0027	D-1619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT		
Correspond	ent Name and Address	S Area Code and Telephone Numb	er (317) 634-3456		
Name	Clifford W. Browning	<u> </u>			
Address (line 1)	Woodard, Emhardt,	Naughton, Moriarty & McNo	ett		
Address (line 2)	111 Monument Circ	le, Suite 3700			
Address (line 3)	Bank One Center/T	ower			
Address (line 4)	Indianapolis, Ind	iana 46204-5137			
Pages	Enter the total number of including any attachmen	pages of the attached conveyance do	cument # 3		
• •	Number(s) or Patent N		rk if additional numbers attached		
Pat 09/173,258 If this document is signed by the first	tent Application Number(s)	Patent Application, enter the date the patent application	atent Number(s)		
Ente only has	er PCT application number tif a U.S. Application Num not been assigned.	PCT PCT PCT	PCT		
Number of F	Properties Enter the	total number of properties involved.	# 1		
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): Method of Payment: Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.) Deposit Account Number: # 23-3030					
Chalamant o	and Signature	Authorization to charge additional fees	: Yes X No		
To the attach indica	and Signature best of my knowledge and ed copy is a true copy of the ted herein. W. Browning	d belief, the foregoing information is to the original document. Charges to dep	12/23/98		
Name	e of Person Signing	Signature	⁽ Date		

PATENT REEL: 9669 FRAME: 0416

P. O.

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREA	2.5
--------	-----

(1)	(Name of Inventor)	Mark Carmichael
	(Address of Inventor)	Alt-Mor. Ballater Road, Aboyne, Aberdeenshire, AB34 5HN, United Kingdom
(2)	(Name of Inventor)	Paul Howler
	(Address of Inventor)	234 North Deeside Road, Cults, Aberdeen, ABIS OPB
		United Kinedom
(3)	(Name of Inventor)	
	(Address of Inventor)	
	Apparatus	and method for circulating fluid in a well bore
for wi	nich Assignor has made or	will make application for Letters Patent of the United States; and
WHE:	REAS:	
(Nam	e of Assignee):	Specialised Petrolcum Services Limited
(Addr	ess of Assignee):	Peregrine Road, Westhill Business Park, Westhill, Aberdeenshire, AB32 6.H., United Kingdom
(Legal Nature of Assignee):		A Company incorporated in Scotland, United Kingdom

(hereinafter referred to as "Assignee"), desires to acquire 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all United States Letters Patent, that may be obtained therefor and thereon;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1,00) and other good, valuable and sufficient considerations to Assignor in hand paid, the receipt of which is hereby acknowledged. Assignor has sold, assigned and transferred, and by these presents does not sell, assign and transfer unto Assignee, 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon in the United States, including all reissues and re-examinations thereof.

Assignor hereby authorizes and requests the firm of Woodard, Emhardt, Naughton, Moriarty & McNett of Bank One Center/Tower, 111 Monument Circle, Suite 3700, Indianapolis, Indiana 46204-5137 to insert here in parentheses (Serial No. 69/173, 258, Filed 14 October, 1998) the date and serial number of said application for United States Letters Patent when officially known and Assignor hereby authorizes and requests the Honourable Commissioner of Patents to issue said United States Letters Patent to Assignee, its assigns and legal representatives.

Assignor agrees to sign and execute any and all other papers necessary or desirable for the procurement of Letters Patent and said invention in the United States for the use of Assignee.

IN WI 19	TNESS WHEREOF, ASSIGNOR has hereunto set hand this 2/sr day of DECEMBER 1998	Х
(1)	(Signature of Inventor):	×
(2)	(Signature of Inventor):	×
(3)	(Signature of Inventor):	

(Notarization or Legalization, If Desired)

21-12-98 17:13

RECEIVED FROM:

TOTAL P.04 P.04

PATENT REEL: 9669 FRAME: 0417