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Reference: 1076.40977X00

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Security Agreement Change of Name  Other					
Execution Date: April 4, 21, 2002 and May 7, 2002.	Additional name(s) & address(es) attached? ☐ Yes ☒ No				
<ol> <li>Application number(s) or patent number(s):         If this document is being filed together with a new application, the         A. Patent Application No.(s)     </li> <li>10/011,732, filed December 11, 2001</li> </ol>	execution date of the application is:  B. Patent Registration No.(s)				
Additional number(s) attached  Yes  No					
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved 1				
Name: Antonelli, Terry, Stout & Kraus, LLP	7. Total fee (37 CFR 3.41)\$40.00				
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**PATENT REEL: 012936 FRAME: 0010** 

## ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:				
CAIN; Paul, Flat 2, 3 St Barnabas Road, Cambridge, UK				
FERGUSON; Andrew, 18 City Road, Cambridge, UK				
WILLIAMS; David, 15 Bateman Mews, Cambridge, UK				
(full name(s) and post office address(s) of inventor(s) (including country))				
(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:				
QUANTUM COMPUTER				
(title of discovery or invention)				
[ ] for which application for Letters Patent of the United States has been executed on even date herewith,				
[x] for which application for Letters Patent of the United States has been filed on 11 December 2001, under Seriai No. 10/011,732, and				
WHEREAS:				
HITACHI LIMITED				
(name and address of assignee)				
a the state of the				

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

## NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of ONE Dollar (\$), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any possessions, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

I, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it sto issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and

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PATENT REEL: 012936 FRAME: 0011 behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

I, SAID, ASSIGNOR(S), hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE. its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desireable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called up to do so by the ASSIGNEE, its successors, legal representatives, or assigns sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation and reissue applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discover in all countries, and without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

Assignor's signature:	X Paul hhlles First Name	DAVID A.	WICCIAMS
	First Name	Middle initial	Last name
Citizenship: British			
2002	$\sim$		seal this 44 day of April.,
Assignor's signature:	First Name	PAUL A.  Middle initial	CA(N Last name
Citizenship: British			
2002			seal this $21$ se day of $Aprile$
Assignor's signature:	First Name	Andrew Middle initial	. J. Ferguson  Last name
Citizenship: British			3th Junes Man
IN WITNESS WHEI	REOF, I have hereunto set my	y hand and affixed my	y seal this, day of,

- 2 -

RECORDED: 05/30/2002