

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7244905

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	RUSSELL JACQUES	02/28/2022
RECEIVING PARTY DATA		
Name:	REDISEM LTD	
Street Address:	218-219 2/F PHOTONICS CENTRE, 2 SCIENCE PARK EAST AVENUE	
Internal Address:	HKSTP, SHATIN N.T.	
City:	HONG KONG	
State/Country:	HONG KONG	
PROPERTY NUMBERS Total: 2		
Property Type	Number	
Patent Number:	9647567	
Patent Number:	10396669	
CORRESPONDENCE DATA		
Fax Number:	(978)318-9060	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Phone:	6172076141	
Email:	mail@blueshiftip.com	
Correspondent Name:	ROBERT PLOTKIN	
Address Line 1:	BLUESHIFT IP LLC	
Address Line 2:	1 BROADWAY, 14TH FLOOR	
Address Line 4:	CAMBRIDGE, MASSACHUSETTS 02142	
ATTORNEY DOCKET NUMBER:	SKY.1003US & SKY.1003USC1	
NAME OF SUBMITTER:	ROBERT PLOTKIN	
SIGNATURE:	/Robert Plotkin/	
DATE SIGNED:	03/25/2022	
Total Attachments: 7		
source=SKY-1003US_Assignment#page1.tif		
source=SKY-1003US_Assignment#page2.tif		
source=SKY-1003US_Assignment#page3.tif		
source=SKY-1003US_Assignment#page4.tif		

source=SKY-1003US_Assignment#page5.tif

source=SKY-1003US_Assignment#page6.tif

source=SKY-1003US_Assignment#page7.tif

PATENT

REEL: 059398 FRAME: 0885

DATED

28 February 2022

ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS

between

RUSSELL JACQUES

and

REDISEM LTD

CONTENTS

CLAUSE

1.	Interpretation	1
2.	Assignment	1
3.	Proceedings	2
4.	Governing law and jurisdiction	2

SCHEDULE

SCHEDULE 1	WORK	3
SCHEDULE 2	REGISTERABLE IPRS	4
Part 1.	Registered patents	4
Part 2.	Patent applications	4

THIS AGREEMENT is dated [DATE]

PARTIES

- (1) Russell Jacques of 7 Tai Tung Wo Liu Village, Sai Sha Road, Sai Kung, NT, HK. (Assignor).
- (2) Redisem Ltd incorporated and registered in Hong Kong with business registration number 50062393-000-12 whose registered office is at 218-219 2/F Photonics Centre, 2 Science Park East Avenue, HKSTP, Shatin N.T, Hong Kong (Assignee).

BACKGROUND

- (A) The Assignor has created the materials listed in Schedule 1 (Work)
- (B) The Assignor is the proprietor of the applications for, and registrations of, the intellectual property rights set out in Schedule 2 (together the Registerable IPRs).
- (C) The Assignor has agreed to assign to the Assignee all intellectual property rights in the Work and to assign the Registerable IPRs to the Assignee on the terms set out below.]

AGREED TERMS

1. INTERPRETATION

The definition in this clause applies in this agreement.

Intellectual Property Rights: patents, rights to inventions, copyright and related rights, trade marks, trade names and domain names, rights in get-up, rights in goodwill or to sue for passing off, unfair competition rights, rights in designs, rights in computer software, database rights, rights in confidential information (including know-how and trade secrets) and any other intellectual property rights, in each case whether registered or unregistered and including all applications (and rights to apply) for, and renewals or extensions of, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist, now or in the future, in any part of the world.

2. ASSIGNMENT

- 2.1 In consideration of the sum of HKD1 (receipt of which the Assignor hereby acknowledges)], the Assignor assigns to the Assignee with full title guarantee the following rights:

- (a) all Intellectual Property Rights in the Work;
- (b) the Registerable IPRs;
- (c) the exclusive right for the Assignee and its successors and assignees to carry on the Assignor's business under the

Unregistered Marks and to represent itself as carrying on such business in succession to the Assignor; and

- (d) the right to sue for damages and other remedies for any infringement of any of the rights listed in this clause 2.1 which occurred prior to the date of this assignment.

3. PROCEEDINGS

The Assignor agrees and undertakes to provide to the Assignee (at its request) all reasonable assistance with any proceedings which may be brought by or against the Assignee against or by any third party relating to the rights assigned by this agreement.

4. GOVERNING LAW AND JURISDICTION

- 4.1 This agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of Hong Kong
- 4.2 The parties irrevocably agree that the courts of Hong Kong shall have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with this agreement or its subject matter or formation (including non-contractual disputes or claims).

This agreement has been entered into on the date stated at the beginning of it.

Schedule 1 Work

Bipolar Power Control

This invention relates to a circuit for controlling a power converter featuring BJTs, through use of a control winding on the transformer that provides the base drive for the BJTs. This controller can control the control winding current, thus modifying the commutating of the current or stopping the oscillations. It can provide unidirectional shorts to prevent commutation and can also provide an initial power pulse to control the start or operation of the power converter.

Power converter controller

A power converter controller and methods for its operation are provided that can control a self-oscillating power converter that uses a Bipolar Junction Transistor (BJT) as a switch by manipulating the current flowing in a control winding. The controller is able to determine the optimum time to remove a short circuit applied to the control winding, as well as being able to determine the optimum time to pass current through the control winding. The controller can further draw power from the power converter using the control winding. The controller is capable of maintaining the midpoint voltage of the power converter in the case that the converter has more than one switch. The controller estimates the output power of the converter without requiring a connection to the secondary side of the converter transformer. The controller further controls entry and exit into a low-power mode in which converter oscillations are suppressed.

Measuring load current

A method of controlling a resonant power converter by measuring the average full wave rectified alternating current through a resistor coupled in series with the primary input winding and using an active rectifier to full-wave rectify the voltage across the resistor. The method compares the measured average full wave rectified current to a reference level; and uses this to control the switching frequency of the power converter based on the difference between the average current and the reference level.

Schedule 2 Registerable IPRs

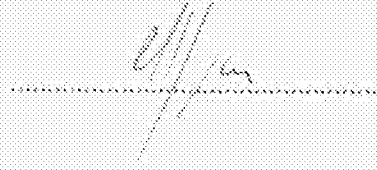
Part 1. Registered patents

Description	Jurisdiction	Registration number	Reference
Bipolar Power Control	Switzerland	2248252	CHP6231W
Bipolar Power Control	China	ZL200980109336.9	CNP6231
Bipolar Power Control	Germany	2248252	DEP6231W
Bipolar Power Control	France	2248252	FRP6231W
Bipolar Power Control	United Kingdom	2248252	GBP6231W
Bipolar Power Control	Japan	5464557	JPP6231
Bipolar Power Control	Netherlands	2248252	NLP6231W
Bipolar Power Control	Taiwan	I634814	TWP6231
Bipolar Power Control	USA	9219428	USP6231
Power converter controller	China	ZL201180022774.9	CNP6631
Measuring load current	China	ZL201610097227.1	CNP6631A
Power converter controller	United Kingdom	2478992	GBP6631
Power converter controller	Taiwan	I523380	TWP6631
Power converter controller	USA	9647567	USP6631
Measuring load current	USA	10396669	USP6631A


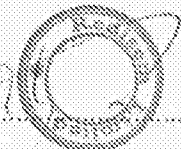
Part 2. Patent applications

Description	Jurisdiction	Application number	Reference
Power converter controller	EPO	11711984.2	USP6631
Measuring load current	EPO	15192083.2	USP6631A

Signed by Russell Jacques

A handwritten signature in dark ink, appearing to be 'R. Jacques', written over a horizontal dotted line.

Signed by Nicolaas Pieter van der
Duijn Schouten
for and on behalf of Redisem Ltd

A handwritten signature in dark ink, appearing to be 'N. van der Duijn Schouten', written over a horizontal dotted line.
A circular stamp with the text 'Redisem Ltd' around the top inner edge and 'Patent' around the bottom inner edge. The center of the stamp is empty.

Director