

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
WANG NANG WANG	01/28/2008
SERGEY STEPANOV	01/28/2008
RECEIVING PARTY DATA	
Name:	UNIVERSITY OF BATH
Street Address:	CLAVERTON DOWN
City:	BATH
State/Country:	UNITED KINGDOM
Postal Code:	BA2 7AY
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	11571514
Application Number:	11576151
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NAME OF SUBMITTER:	ROBERT A. GREEN
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REEL: 022286 FRAME: 0324

Dated 28 JANUARY 2008 ~~2007~~

(1) **WANG NANG WANG**

(2) **SERGEI STEPANOV**

- and -

(3) **UNIVERSITY OF BATH**

Patent Assignment

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THIS ASSIGNMENT is made the 28th day of JANUARY 2008 2007.

BETWEEN:

- (1) **WANG NANG WANG**, a citizen of Taiwan, of Martlets, Midford Lane, Limpley Stoke, Bath BA2 7GW;
- (2) **SERGEI STEPANOV**, a citizen of Russia of 30 St James Parade flat 2 Bath BA1 1UJ (together with Wang Nang Wang ("the Assignors")); and
- (3) **UNIVERSITY OF BATH** a corporation, incorporated in England and Wales by Royal Charter with registration number RC000644 of Claverton Down, Bath, NA2 7AY ("Assignee")

BACKGROUND

- (A) Wang Nang Wang is the proprietor of or applicant for the patents listed in the Schedule to this assignment (**Patents**) and together with Sergei Stepanov invented certain inventions within the claims of the Patents.
- (B) The Assignors and the Assignee have agreed that the Patents shall be assigned to the Assignee.

NOW IT IS HEREBY AGREED as follows:

1. ASSIGNMENT

In consideration of payment of the sum of £1 to each Assignor (receipt of which each Assignor expressly acknowledges), the Assignors assign to the Assignee absolutely the full and exclusive benefit of the Patents including:

- 1.1 the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of all infringements of any of the Patents, whether committed before or after the date of this assignment;
- 1.2 the absolute entitlement to any patents granted pursuant to any of the applications comprised in the Patents, for the full term of such patents; and
- 1.3 the right to apply for, prosecute and obtain patent or similar protection in the UK and all other countries of the world for an invention embodied by any of the applications comprised in the Patents, including the right to claim priority from such applications.

together with all their right, title and interest in and to the inventions covered by the claims of the Patents and any other rights relating thereto in patents and patent applications and other copyrights, design rights, rights in confidential information and all other intellectual property rights (whether or not registered or registerable) and rights or forms of protection of the same, similar or equivalent nature or effect which may subsist anywhere in the world together with all applications for registration of any of the foregoing.

2. FURTHER ASSURANCE

The Assignors shall, at the expense of the Assignee, execute and sign all such instruments, applications and documents and do all such acts and things as may reasonably be required by the Assignee to enable the Assignee or its nominee to enjoy the full benefit of the rights assigned by this agreement.

3. WARRANTIES

The Assignors warrant that:

- 3.1 they have not licensed or assigned any rights in or under the Patents;
- 3.2 the Patents are in force and all renewal fees have been paid; and
- 3.3 they are not aware of any claims of any third parties to ownership for entitlement to the Patents.

4. GOVERNING LAW AND JURISDICTION

This assignment shall be governed by and construed in accordance with the law of England and the parties hereby submit to the exclusive jurisdiction of the English courts.

SIGNED BY the authorised representatives of the parties on the date first appearing above

SIGNED by WANG NANG WANG
WANG NANG WANG

[Signature]
(Signature)
28 JAN 2008
(Date)

WITNESS:
Signature [Signature]
Name DAVID COLEMAN
Address 8 TIMOR ROAD
WESTBURY BA13 2LJ

Occupation TECHNOLOGY TRANSFER MANAGER
(PLEASE COMPLETE IN CAPITALS)

SIGNED by Sergey Stepanov
SERGEI STEPANOV

[Signature]
(Signature)
28 JAN 2008
(Date)

WITNESS:
Signature [Signature]
Name DAVID COLEMAN
Address 8 TIMOR ROAD
WESTBURY BA13 2LJ

Occupation TECHNOLOGY TRANSFER MANAGER
(PLEASE COMPLETE IN CAPITALS)

SIGNED by DIANE ADERYN
for and on behalf of **UNIVERSITY OF BATH**

Diane Aderyn
(Signature)
28 JAN 2008
(Date)

WITNESS:

Signature Angela Milson
Name ANGELA MILSON
Address 10 LANSVALE CLOSE
FRANE
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Occupation PA
(PLEASE COMPLETE IN CAPITALS)

SCHEDULE

The Patents

Patent Title	Patent Application Number(s) and Dates, and Territories	Priority Filings (number and date)	Status	Abstract
1. Deposition Technique For Producing High Quality Compound Semiconductor Materials	<p>International Patent Application Number PCT/GB2005/002529 filed on 27 June 2005</p> <p>European Patent Application No. 05755392.7</p> <p>Chinese Patent Application No. 200580022204.4</p> <p>Indian Patent Application No. 3928/KOLNP06</p> <p>US Patent Application No. 11/571,514</p> <p>Japanese Patent Application No. 2007-518683</p> <p>South Korean Patent Application No. 2007-7001308</p>	<p>UK Patent Application Number GB0414607.2 filed on 30 June 2004</p>	<p>National applications filed in US, Europe, Japan, South Korea, China and India (from PCT application) - International Filing date: 27 June 2005</p>	<p>Deposited layers are advantageously obtained by utilizing a specific hydride vapour phase epitaxy deposition procedure. In this procedure, a vertical growth cell structure with extended diffusion layer, a homogenising diaphragm, sidewall purging gases, anal independent gas and substrate heaters is used for the deposition of III-V and VI compound semiconductors. This gas flow is uniformly mixed through the extended diffusion layer and directed so that it contacts the full surface of the substrate to produce high quality and uniform films. Exemplary of such gas flow configurations are the positioning of a substrate at a distance from the gas outlets to allow the extended diffusion and a diaphragm placed in a short distance above the substrate to minimise the impact of the convection effect and to improve the uniformity. This symmetrical configuration allows easy scale up from a single wafer to multi-wafer system. This vertical configuration allows the quick switching between different reactive gas precursors so that time modulated growth and etch processes can be employed to further minimise the defects density of the deposited materials.</p>
2. Textured Light Emitting Diodes	<p>International Patent Application Number PCT/GB2005/003704 filed on 27 September 2005</p> <p>European Patent Application No. 05787238.4</p> <p>Chinese Patent Application No. 200580032685.7</p> <p>Indian Patent Application No. TBA</p> <p>US Patent Application No. 11/576,151</p> <p>Japanese Patent Application No 2007-532971</p> <p>South Korean Patent Application No. 2007-7008414</p>	<p>UK Patent Application Number GB0421500.0 filed on 28 September 2004</p>	<p>Pending Internationally - applications filed, or being filed in US, Europe, Japan, South Korea, China and India (from PCT application)</p>	<p>A high fill factor textured light emitting diode structure comprises: a first textured cladding and contact layer (2) comprising a doped III-V or II-VI group compound semiconductor or alloys of such semiconductors deposited by epitaxial lateral overgrowth (ELOG) onto a patterned substrate (1); a textured undoped or doped active layer (3) comprising a III-V or II-VI group semiconductor or alloys of such semiconductors and where radiative recombination of electrons and holes occurs or intersubband transition occurs; and a second textured cladding and contact layer (4) comprising a doped III-V or II-VI group semiconductor or alloys of such semiconductors.</p>