

05-26-2006

FORM PTO-1595  
(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)  
M&G-

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office



103246058

5-27-06

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  The Secretary of State for the Home Department  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies):  Forensic Science Service Ltd. 35 Vine Street London EC3N 2AA United Kingdom  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--

3. Nature of conveyance:

<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Merger
<input type="checkbox"/> Security Agreement	<input type="checkbox"/> Change of Name
<input type="checkbox"/> Other:	

Execution Date: December 6, 2005

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)  08/982,991 09/624,528	B. Patent No.(s)  5,861,824 6,936,420
--	--

Additional numbers attached?  Yes  No

OFFICE OF PUBLIC RECORDS  
2006 MAY 24 PM 12:51  
FINANCE SECTION

5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Gregory A. Sebald Address: Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903	6. Total number of applications and patents involved: 40  7. Total fee (37 CFR 3.41): \$1600.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account  8. Please charge any additional fees or credit any overpayments to our Deposit account number: 13-2725
---	---

DO NOT USE THIS SPACE

9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Gregory A. Sebald (33,280) Name of Person Signing	 Signature	May 22, 2006 Date
--	---------------	----------------------

Total number of pages including cover sheet, attachments, and document: 22

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:  
**Mail Stop Assignment Recordation Services**  
Director - U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE UNDER 37 CFR 1.8:**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner of Patents and Trademarks, Mail Stop Assignments, P. O. Box 1450, Alexandria, VA 22313-1450 on May 22, 2006

By: Mele Kaufman  
Name: Mele Kaufman

**23552**  
PATENT TRADEMARK OFFICE

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of information systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

05/25/2006 DBYRNE 00000205 132725 08982991  
01 FC:8021 1600.00 DA

**PATENT**  
**REEL: 017921 FRAME: 0073**

Date: <sup>NRP</sup>~~2003~~ 6 December 2005

**The Secretary of State for the Home Department**

Assignor

**Forensic Science Service Ltd.**

Assignee

## Patent Assignment

**Field Fisher Waterhouse** 35 Vine Street London EC3N 2AA

**PATENT**  
**REEL: 017921 FRAME: 0074**

# Contents

No	Heading	Page
1.	Definitions and Interpretation	1
2.	Assignment and Further Assurance	3
3.	Option in respect of Schedule 2 Patents	4
4.	Jurisdiction	5

THIS DEED is made this 6 day of <sup>December</sup> 2005

**BETWEEN:**

- (1) **THE SECRETARY OF STATE FOR THE HOME DEPARTMENT** whose principal office is at Peel Building, 2 Marsham Street, London SW1P 9DF (the "Assignor"); and
- (2) **FORENSIC SCIENCE SERVICE LTD.** (Company Registration No. 5607780) whose registered office is at 35 Vine Street, London EC3N 2AA (the "Assignee").

**WHEREAS:**

- (A) The Assignor is the proprietor of the Patents (as defined below) and of the Know-How (as defined below).
- (B) The Assignor has agreed to assign all right title and interest in the Patents and the Know-How to the Assignee on the terms of this Assignment.

**NOW IT IS HEREBY AGREED** as follows:

**1. Definitions and Interpretation**

**1.1 Definitions**

In this Agreement the following expressions have the following meanings:

<b>Expression</b>	<b>Meaning</b>
"Fair Value"	has the meaning given to it in Clause 4.4;
"Forensic Use"	the prevention, investigation and detection of crime;
"Improvements"	all subsequent further inventions or patents or patent applications or Know-How by way of improvements to the Patents or the Know-How that would make any of them cheaper or more effective or in any way easier or more useful or

valuable or in any other way make any of them a preferable article or process in commerce;

**“Know-How”**

all ideas, concepts, schemes, information, knowledge, techniques, methodology and anything else in the nature of know-how;

**“Option”**

has the meaning given to it in Clause 4.1;

**“Patents”**

the patents and patent applications listed in Schedule 1 and Schedule 2 and the inventions described in those patents and patent applications, together with:

- (a) the benefit of any patent granted pursuant to any of the patent applications;
- (b) the right to apply for patent or other protection in respect of the inventions described in those patents and patent applications;
- (c) all rights to any continuations, continuations in part, extensions, reissues and divisions, and any other patents or patent applications claiming priority from any such patent or application or from those in (a) or (b) above, together with similar rights which are based on or are derived from any of the foregoing;
- (d) any supplementary protection certificates or similar rights which are based on or are derived from any patents described in (a), (b) or (c) above;
- (e) all Know-How relating to any of (a), (b) or (c) above; and
- (f) the right to sue for past infringements of any of the above rights and to retain any damages obtained as a result of any such action;

1.2 Interpretation

- (a) The expression **“full title guarantee”** in relation to the disposal of any thing implies the covenants referable to that expression as set out in sections 2 and 3 of the Law of Property (Miscellaneous Provisions) Act 1994, except that the word **“reasonably”** shall be deleted from the covenant set out in section 2(1)(b) of that Act and the covenant set out in section 3(1) of that Act shall not be qualified by the words **“other than any charges, encumbrances or rights which that person does not and could not reasonably be expected to know about”**.
- (b) References to a **“party”** shall, unless the context otherwise requires, be a reference to a party to this Agreement and any permitted successors and assignees of such party.
- (c) References to any provision of any legislation are to be construed as a reference to that provision as amended, re-enacted or extended from time to time.
- (d) References to Clauses are references to the clauses of this Agreement, references to Schedules are references to the schedules to this Agreement and references to paragraphs are references to the relevant paragraph of the Schedule in which the reference occurs.
- (e) The headings to Clauses, Schedules and to paragraphs of Schedules shall not affect their interpretation.
- (f) Words importing the singular include the plural and vice versa, words importing one gender include the other genders and references to persons include bodies corporate and unincorporated.

**2. Assignment and Further Assurance**

2:1 Assignment

Subject to the terms and conditions of this Assignment, in consideration of the sum of five thousand Euros (€5,000.00) now paid by the Assignee to the Assignor (receipt of which is hereby acknowledged) the Assignor assigns with full title guarantee and transfers to the Assignee all right, title and interest to the Patents.

## 2.2 Further Assurance

The Assignor agrees that it will at all times hereafter at the request and cost of the Assignee do all such acts and execute all such documents as may reasonably be necessary or desirable both to secure the vesting in the Assignee of all rights assigned to it in this Agreement and to assist in the resolution of any question concerning the Patents.

## 2.3 Authority to Sign

The Assignor confirms that the Assignee is authorised to sign on behalf of the Assignor all forms and documents that are required by the relevant patent office to record this assignment at that patent office in relation to any of the Patents.

## 3. Option in respect of Schedule 2 Patents

### 3.1 Scope of Option

The Assignee hereby grants to the Assignor, on and subject to the terms of this Clause 4, the exclusive option (the "**Option**") at any time to take a licence solely for the services of the Crown (which for the avoidance of doubt shall not include any regional police authority from time to time or the National Police Improvement Agency) of any or all of the Schedule 2 Patents and their Improvements and Know-How, such licence being non-exclusive.

### 3.2 Exercise of Option

The Option shall be exercisable at any time by the Assignor giving written notice to the Assignee.

### 3.3 Subsequent Exercise

If the Assignor exercises the Option in respect of one or more of the Schedule 2 Patents or Improvements or Know-How, the Assignor shall retain the right to exercise the Option on a subsequent occasion or occasions in respect of the remainder of the Patents and Improvements and Know-How.

### 3.4 Compensation

- (a) The Assignor shall pay compensation to the Assignee for any exercise of the Option to reflect the Fair Value to the Assignee of the licence to the Assignor. The Assignor and the Assignee shall use all reasonable endeavours to agree the compensation payable without delay following the exercise of the Option.

3 cr. pfw

- (b) For the purposes of this Clause 4.4, "Fair Value" shall:
- (i) be determined on the basis of a risk adjusted assessment of expected actual outturn of net loss (i.e. after taking of costs) that derives directly from the exercise of the Option and for which the Assignee, making reasonable endeavours, could not be expected to mitigate or replace; and
  - (ii) exclude sums that are derived from the Crown's ongoing use as a customer unless such sums have derived from an existing contract between the parties,

and for the avoidance of doubt, the assessment to be made pursuant to Clause 3.4(b)(i) shall take account of the Assignee's record at the date the Option is exercised in successfully exploiting the Patents and their Improvements and Know-How.

- (c) The parties agree that where the expected Fair Value of a licence is limited, there shall be a threshold limit of £50,000 to any compensation payment to avoid the cost and expense of undertaking an evaluation process.
- (d) The amount of compensation payable shall, if not agreed between the Assignee and the Assignor with the approval of HM Treasury, be determined at the request of either party by an independent expert agreed between the parties or, failing such agreement, appointed on the application of either party by the Chairman of the Patent Bar Association from time to time.
- (e) For the avoidance of doubt these provisions as to compensation shall be in addition to the provisions of the Patents Act 1977, and where there is any dispute as to which provisions shall be applied, the parties agree that the terms of this Clause 3.4 shall prevail.

#### 4. Jurisdiction

This Agreement is governed by English law and is subject to the jurisdiction of the English Courts.

**IN WITNESS** whereof this Agreement was executed as a Deed by the hands of the parties or their duly authorised attorneys or representatives the day and year first above written.



Schedule 1

General FSS Patents

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
1.	New alleles and allelic ladder mixtures, useful as a control sample for DNA profiling in forensic environments. (Allelic Ladder)	Arnold CD; Barber MD; Burke T; Gill P; Gilbard SM; Griffiths RA; Hayward MD; Johnson PE; Smith CD; Urquhart AJ; Arnold J; Griffiths RAL	UK Australia Australia Canada Europe New Zealand South Africa USA USA USA USA USA	9713597.4 73240/98 2003200444 2236364 98305120.2 330828 98/5663 09/107029 09/498567 09/706525 09/910183 Not yet known - Divisional of 09/910183 filed 5Oct05	- - - - EP 0887426 - - - - - - US2003-0175701 -	- - AU2003200444 - - NZ330828 ZA98/5663 - - - - -
1a	Divisional application of Allelic Ladder filed out of 09/910183	as above	USA	11/244331		
2.	Obtaining information about identity or source of sample useful for forensic	Grimes EA; Lowe AL; Noake PJ; Urquhart	UK	9917308.0	-	-

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
	investigations comprises determining variations at one or more locations on a DNA sequence. (Red hair identification)	AJ	PCT Europe USA	GB00/02792 00948137.5 09/624528	WO2001/007908 EP1234175 -	- - -
3.	DNA marking system which enables unique marking of articles such as bank notes, cheques, vouchers, credit cards, jewels, has several different DNA fragment types, each comprising several different length DNA fragments. (DNA tags for items - Length Variation)	Hopwood AJ; Wetton JH	UK PCT Australia Canada Europe Japan USA	0021367.8 GB01/03929 2001 286042 2420855 01965397.1 522541/02 10/362706	- WO2002/018636 - - EP1313884 JP2004507746 US2004-0076972	- - - - - - -
4.	Marking system comprising multiple DNA fragment types for articles such as cheques, vouchers, bank cards, credit cards, security cards, comprises multiple DNA fragment types having common end portions with a variable portion in between. (DNA Tags for items - Sequence Variation)	Hopwood AJ; Wetton JH	UK UK PCT Europe	0204889.0 0206957.3 GB03/00886 03712311.4	- - WO2003/074733 EP1483411	- - - -
5.	Setting a capillary gel array for size based separation of test sample and standard, by determining number of capillaries to separate standard, equating target an experimental standard deviations of component mean size. (STR Capillary Array)	Gill P; Koumi P; Tsang K	UK PCT Europe Japan USA	0119959.5 GB02/03765 02755174.6 521873/2003 10/486870	- WO2003/016566 EP1417343 JP2005500542 US2004-0197925	- - - - -
6.	Improved method for determining DNA contamination of samples, comprises	Gill P; Kirkham A	UK	0316519.8	-	-

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
	obtaining information on whether or not DNA is suggested as present in negative controls and determining probability of DNA being present in negative controls. <b>(Negative Control)</b>		PCT	GB04/003003	WO2005/007885	-
7.	Extracting DNA from sample comprising providing extraction channel, introducing sample containing DNA to extraction channel, passing sample and removing sample from channel, and subjecting extracted DNA to further process steps. <b>(Microfilm Located Silicon Channels)</b>	Cox T (non FSS employee; Gill P; Long A	UK PCT Europe USA	0303524.3 GB04/000618 04711409.5 10/545752	- WO2004/071662 EP1592507 -	- - - -
8.	Identifying a single nucleotide adjacent to target sequence by annealing primer adjacent to the base and extension with fluorescently labelled chain terminator, for simultaneous screening of genetic diseases, or for forensic testing. <b>(Nucleotide Sequencing Method)</b>	Sullivan K; Tully G	UK PCT Europe Austria Belgium Denmark France Germany Holland Ireland Italy Portugal Spain Sweden	94017211 GB95/01987 95929169.1 - - - - - - - - - - - -	- WO96/006187 - - - - - - - - - - - - -	- - EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747 EP0777747

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
			Switzerland	-	-	EP0777747
			UK	-	-	EP0777747
			USA	08/776994	-	US5925520
9.	Investigating single nucleotide polymorphisms in a DNA sample, involves amplifying sample DNA with two sets of primers consecutively, and examining one or more characteristics of the product. (Universal Reporter Primers)	Gill P; Hussain J; Long A	UK	9917307.2	-	-
			UK	0009187.6	-	-
			PCT	GB00/02795	WO2001/007640	-
			Australia	61706/00	-	-
			Canada	2380203	-	-
			Europe	00948138.3	EP1196623	-
			NZ	517116	-	-
			USA	09/624267	-	-
			USA	10/034692	US2003-0138780	-
10.	Determining defined source of DNA mixture by detecting allelic identity of DNA determining probability functions for sample from different persons, using function ratio to determine loci ratios and combining them. (Biallelic Loci and Mixture Analysis)	Gill P; Hussain J; Long A; Tully G; Gill PD; Hussain J; Long AS	UK	9930307.5	-	-
			PCT	GB00/04922	WO2001/046466	-
			Australia	22061/01	-	-
			Canada	2395483	-	-
			Europe	00985659.2	EP1242623	-
			NZ	520262	-	NZ520262
			USA	09/745687	US2002--0009725	-
			USA	10/369193	US20040152087	-
11.	Amplifying DNA sequences including single nucleotide polymorphism in sample by subjecting DNA to repeated cycles of	Gill PD; Hussain J; Long AS; Tully G; Gill P; Hussain J; Long A	UK	0114639.8	-	-
			PCT	GB02/02500	WO2002/103044	-

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
	amplification including denaturation, annealing, and correctly annealed primer extension steps, in order. <b>(Cycling Regime)</b>		Europe Australia USA	02747548.2 2002317939 10/174197	EP1397517 - US2003-0027190	- - 6936420
12.	Evaluating primers by performing initial evaluation, obtaining single nucleotide polymorphism sites and related primer identities, generating primers suitable to identities, conducting amplification, selecting primers. <b>(SNP's Selection Method)</b>	Gill PD; Hussain Ji; Long AS; Tully G; Gill P; Hussain J; Long A	UK PCT Europe USA USA	0114632.3 GB02/02630 02743360.6 10/174148 11/153837	- WO2002/103045 EP1397514 US2003-0008312 -	- - - -
13.	New amplification mixture including at least one primer pair, useful for enhancing amplification and/or analysis, and for investigating single nucleotide polymorphisms in a sample of DNA. <b>(Universal Reporter Primers – Specifics)</b>	Gill P; Hussain J; Long A; Hussain Ji; Long AS	UK UK PCT Europe USA USA	0120300.9 0208363.2 GB02/03849 02755217.3 10/225938 10/892854	- - WO2003/018831 EP1419273 US2003-070666 US2005-0014183	- - - - - -
14.	Establishing the genotype of locus in relation to forensic and other applications comprises analysing and comparing a window defined relative to an indication of a series of calibration samples and unknown samples <b>(SNP Quantitative Assay)</b>	Dixon L; Gill P	UK PCT Europe USA	0208364.0 GB03/01489 03722726.1 10/408961	- WO2003/087407 EP1493122 US2003-0219815	- - - -

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
15.	A calculation to determine the threshold levels above which SNPs can be assigned a designation. <b>(SNP Reporting)</b>	Gill PD; Dixon L; Koumi P	UK PCT USA	0419482.5 GB05/003241 11/212370	- - -	- - -
16.	Comparing reference and test DNA samples, useful in forensic analysis, by determining a likelihood ratio that allele patterns match. <b>(Few Cell DNA Profiling)</b>	Buckleton JS (non-FSS employee); Gill PD; Whitaker JP; Gill P	UK PCT Australia Europe USA USA	0009294.0 GB01/01657 2001248547 01921573.0 09/834822 10/977698	- WO2001/079541 - EP1280933 US2002-0007248 US2005-0064500	- - - - - -
17.	Establishing the genotype of a DNA sample for investigating the potential sources of a DNA sample arising from a plurality of sources by analysing the sample to produce a data profile and comparing the data and simulation profiles. <b>(Statistical Simulation)</b>	Buckleton JS (non-FSS employee); Curran J (non-FSS employee); Evelt I; Foreman L; Pope S; Triggs C (non-FSS employee)	UK PCT Australia Canada Europe NZ USA USA	0130674.5 GB02/05837 2002353190 2741090 02788208.3 533685 10/499882 11/121290	- WO200356035 - EP1456412 - - - -	- - - - - - - -
18.	Consideration of DNA based links between at least 2 situations, useful in forensics, comprises considering a genotype as possibly giving rise to each result of a set of test results. <b>(Intelligence Tools)</b>	Buckleton JS (non-FSS employee); Pinchin R	UK PCT Australia Europe USA	0207365.8 GB03/01389 2003226520 03745337.0 10/450597	- WO2003/083138 - EP1490826 2005-0142544	- - - - -

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
19.	Interpretation. Improved method of comparing first data set with second data set. (Raw Data Comparison)	Bill M	UK UK PCT USA	0317335.8 0322742.8 GB04/02992 10/674590	- - WO2005/015472 US2005-021239	- - - -
20.	A technique for combining the DNA profiles observed for a number of repeats of the same sample to present a consensus result. This can then be used for intelligence based DNA searches. (PCR Consensus Theory)	Bill M; Young R	UK PCT USA	0417763.0 GB05/002713 11/178045	- - -	- - -
21.	A method for modelling the entire DNA analysis process by a mathematical simulation to substitute or complement experimental work. (DNA Analysis Simulation)	Gill PD	UK UK	0426579.9 0506673.3	- -	- -
22.	A fully quantitative model for DNA mixture interpretation using further enhancements to DNA Analysis Simulation. (MCM Method for Mixtures)	Gill PD; Curran J (non-FSS employee)	UK	0505748.4	-	-
23.	Sampling apparatus for collecting and/or storing samples, comprises sealed containers a swab, a source of moisture and desiccant. (Swabs to Sample DNA)	Fontaine-Hill R; Kirtkby K	UK UK	0000125.5 0100266.6	- -	- GB2358061
24.	Apparatus for dispensing material, in particular rapid curing material e.g. film coatings for obtaining confirmation about markings and residues, has two coaxially located material component reservoirs.	Brennan JS; Rollins V (non-FSS employee)	UK UK	9911820.0 0012276.2	- -	- GB2351459

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
25.	<b>(Rapid curing material dispenser)</b> Analysing analyte species, e.g. disease marker from sample involves feeding analyte species in second substrate to analysis stage, where information is determined about analyte species. <b>(Focussing at Substrate/Buffer Interface)</b>	Manz A (non-FSS employee); Valussi S	UK PCT Europe Japan USA	0213979.8 GB03/02632 03740746.7 172348/03 10/463647	- WO2003/106986 EP1514100 JP2004-132952 US2004-0040849	- - - - -
26.	Improvements in investigations into the location of a mobile phone at the time of the call by conducting an actual survey of the cell boundaries for an antenna in a mobile phone network by establishing the antenna which would be used by attending locations in a grid around the antenna. <b>(Mobile Phone Cell Boundary Survey)</b>	Goode A; Stokes M	UK UK PCT	0421721.2 0516962.8 GB05/003772	- - -	- - -
27.	Treatment of item having pre-treatment state and second post-treatment state to produce deoxyribonucleic acid free item, comprises contacting item with material that includes ethylene oxide. <b>(DNA Decontamination)</b>	Allen H	UK UK UK PCT USA	0316520.6 0328134.2 0328135.9 GB04/02993 10/814048	- GB2404151 - WO2005/007884 US2005-0013730	- - - - -
28.	Identification of specific genotype(s) involves using test sample relationship that applies loci for which allele identity and allele level in deoxyribonucleic acid test sample is determined in analysis. <b>(Preferential Degradation)</b>	Buckleton J (non-FSS employee); Gill P	UK PCT	130675.2 GB02/005836	- WO2002/356494	- -



No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
29.	<p>Labelling male germ cell in sample, by adding labelled monoclonal antibody that binds to germ cell, or inner acrosomal membrane, equatorial segment, post acrosomal region or chromatin of germ cell, to the sample. (<b>Sperm Specific Monoclonal Antibodies</b>)</p>	Al-iesa N (non-FSS employee); Flaxman CS; Moore H (non-FSS employee)	UK PCT	114922.8 GB02/02595	- WO2002/103357	- -
30	<p>Forensic investigations using DNA to predict physical characteristics of sample source, involves determining presence of one or more variations at one or more DNA locations. (<b>Ethnic Prediction</b>)</p>	Evitt I; Hopwood AJ; Lowe AL; Urquhart AJ; Evitt I	UK PCT Australia Canada Europe USA	9917309.8 GB00/02793 64538/00 2380198 951678.2 10/360838	- WO2001/007650 - - EPI238101 US2003-0225530	- - - - - -
31.	<p>Imaging apparatus for on-site profile e.g. crime scene has scanner head which performs imaging of profile when light sensor, that directs light from profile, is moved relative to illuminated location. (<b>Forensic Mark Scanner</b>)</p>	Dabeedin J	UK UK PCT	9906753 3045.2 GB00/01014	- - WO2000/057128	- - -
32.	<p>Primers and primer pair mixtures - and DNA profiling method, useful at e.g. crime scene. (<b>TGM</b>)</p>	Kimpton C; Watson S	UK Australia Canada Europe South Africa NZ USA	9625124.4 46825/97 2223110 97309769.4 97/10827 329307 08/982991	- - - EP846775 - - -	- - - - ZA9710827 NZ329307 -

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Country	Application No	Publication No	Patent No
33.	A method of producing and providing a set of naturally degraded DNA standards. (Degradation Standards)	Pulker H; Dixon L	US	60/684040	-	-
34.	Visualizing a deposit formed by contact with skin useful for criminal investigation involves exposing at least part of substrate bearing deposit to humidity and/or temperature at or above controlled levels before contacting with reagent. (Elevated Humidity Fingerprint)	Brennan JS	UK PCT UK	0308084.3 GB04/001520 0520922.6	- WO2004/089215 -	- - -

Schedule 2

Patents Subject to the Option

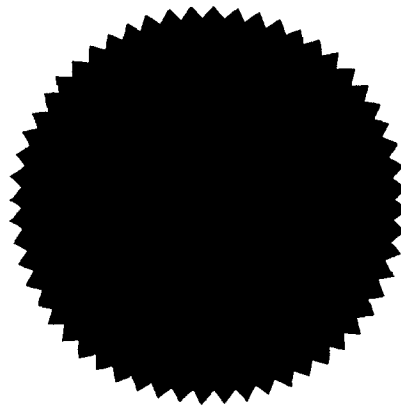
No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Patent numbers	Country	Application No	Publication No	Patent No
1.	A method for expressing the features of a fingerprint as a vector. Two vectors can be compared and an assessment made of whether they are from the same source. (Fingerprint Vector Feature Consideration)	Neumann C; Puch-Solis R		UK UK PCT USA	0422785.6 0502902.0 GB05/003945 11/084354	- - - -	- - - -
2.	A method to establish the strength of a match between two fingerprints using an estimate of how much prints from the same source vary against an estimate of how much prints from different sources vary. (Fingerprints - Data & Model Driven Approach)	Neumann C; Puch-Solis R		UK UK PCT USA	0422784.9 0502900.4 GB05/003961 11/083579	- - - -	- - - -
3.	A method to improve the data obtained from fingerprints by removing noise and reconciling irregularities in the print. (Fingerprints - Healing & Cleaning)	Neumann C; Puch-Solis R		UK UK PCT USA	0422786.4 0502893.1 Not yet known 11/084352	- - - -	- - - -
4.	A method of simulating a large number of differently distorted representations of fingerprints from a set of undistorted prints in order to provide data sets to challenge and enhance effectiveness of fingerprint comparisons via the Data and Model Driven Approach. (Fingerprints - Distortion)	Neumann C; Puch-Solis R		UK UK PCT USA	0423648.5 0502849.3 Not yet known 11/084356	- - - -	- - - -

No.	Family of Patents: Brief description and FSS Internal Title	Inventor(s)	Patent numbers	Country	Application No	Publication No	Patent No
5.	A method of expressing features of a fingerprint as a series of triangles radiating from a single point. The data can be compared with that generated from another print to assess whether these are from the same source. ( <b>Radial Triangulation</b> )	Neumann C; Puch-Solis R		UK USA	0502990.4 11/083822	- -	- -

3563843 v6

SIGNED as a DEED by THE SECRETARY OF STATE FOR THE HOME DEPARTMENT acting by:

*[Handwritten Signature]*  
.....  
PEVELOPE FASBYTH



SIGNED as a DEED by FORENSIC SCIENCE SERVICE LTD. acting by a Director and the Secretary/two Directors:

*[Handwritten Signature]*.....Director  
*[Handwritten Signature]*.....Director/Secretary

4. Application number(s) or patent number(s)

A. Patent Application No.(s) - Continued

10/360,838  
09/107,029  
09/498,567  
09/706,525  
09/910,183  
09/745,687  
10/369,193  
10/362,706  
10/225,938  
10/892,854  
09/834,822  
10/977,698  
09/624,267  
10/034,692  
11/223,848  
10/174,148  
11/153,837  
10/486,870  
10/499,882  
11/121,290  
10/545,752  
10/450,597  
10/408,961  
10/463,647  
10/674,590  
10/814,048  
11/178,045  
11/083,354  
11/083,579  
11/084,352  
11/212,370  
11/084,356  
11/083,822  
60/684,040  
11/253,389  
11/244,331