

Freedom of Information Request - R277

Annex 2 - Grants for Research & Development Awarded 1/4/2005 to date

Project Title	Project Type	Company Name(s)
Folding Vertical Panel Saw	Micro - R & D Grant	K V Bunker T/A Cutting Edge Machinery
Powder Formulation & Process Improvement for Patented Insect Control Technology	Research - R & D Grant	Exosect Ltd
New Web-based Tool giving an Employment References Analytical System	Micro - R & D Grant	The Career Innovation Company Ltd
Telematics Web Services Application Services Platform	Development - R & D Grant	Radicom Ltd
Geometric Soft Analyser	Micro - R & D Grant	Curvaceous Software Ltd
Novelphotoreceivers for environmental monitoring and industrial control applicatons	Research - R & D Grant	RedWave Labs Ltd
A Displaced Plasma Feed	Research - R & D Grant	Plasma Antennas Ltd
Motorcycle Noise Reduction System	Micro - R & D Grant	Cognitive Sales Consulting T/A ActivEar Ltd
Drowning Detection System	Research - R & D Grant	Pool Safety Systems Ltd
A new type of windscreen wiper system - 'YPERDRIVE'	Research - R & D Grant	The Matador Company Limited
Leisure Craft/Vehicle Cooker System	Micro - R & D Grant	GN Espace
Fabrication Process for a Liquid Crystal (LC) Coated Microlens component	Research - R & D Grant	Ocuity Limited
Planar-beam retro-reflection detection system for high-speed, high- resolution applications	Micro - R & D Grant	Lindsay Golf Limited
Pre-production prototype inspection machine	Development - R & D Grant	Lloyd Doyle Ltd
Solar Collector system for hot water	Micro - R & D Grant	Selectec Consultants Ltd
Pill Protect	Research - R & D Grant	3 Point Blue Ltd
Research into Terrorist Proof Blasting System	Research - R & D Grant	Advanced Blasting Systems Ltd
Innovative Technology for Trimming in Commercial Book-Binding Machinery	Research - R & D Grant	IBIS Integrated Bindery Systems Ltd
Marine Sulphur Abatement System	Development - R & D Grant	AquaFuel Research Ltd
The Design and Volume Scale-Up of SurePin - A Safety Device for the Construction Industry	Micro - R & D Grant	BM Solutions Ltd

Ambient Temperature Vaccination Storage	Research - R & D Grant	Stabilitech Ltd
A Nanotechnology Pharmaceutical Development Strategy for the Treatment of Bacteria Infections including MRSA	Exceptional - R & D Grant (Dev 04/09)	Midatech Ltd
Development of a wireless production monitoring system for use in the oil and gas production industry	Development - R & D Grant	Wireless Measurement Ltd
The first total Mobile Enterprise Management System	Development - R & D Grant	biz2mobile Ltd
Research and develop an innovative cell culture based drug discovery technology	Micro - R & D Grant	Mucokinetica Ltd
Pensions Administration System	Development - R & D Grant	Dunstan Thomas Holdings Limited
Isothermal Nucleic Acid Amplification	Research - R & D Grant	GeneForm Technologies Ltd
To develop 'Project Agenda'	Micro - R & D Grant	Methodax Ltd
A novel self-assembling 'patch-in-a-can' (MedSpray) formulation for improved topical drug delivery	Development - R & D Grant	Medpharm Ltd
The SIMBlock Building System	Research - R & D Grant	Shelmat Enterprises Ltd
Produce a device which will prevent dispense of the alcoholic beverages through the wrong dispense font	Micro - R & D Grant	Futuretec Technologies Ltd
To formulate a range of chemicals for the printed circuit board industry	Development - R & D Grant	Electra Polymers Limited
Improved wind turbines and phase converters	Research - R & D Grant	Boost Energy Systems Limited
Novel Ink Pump Pixel Cell for use in display systems	Research - R & D Grant	MA Systems & Control Ltd
Microwave Heating for the regeneration of a desiccant rotary wheel	Research - R & D Grant	Island Wall Design
A single-board microcomputer capable of communicating by Audio, Video, IP Telephony and Inductive Transmission means	Research - R & D Grant	Integra Product Solutions Ltd
Resistively heated evaporative coating system for industrial & research applications.	Research - R & D Grant	Oxford Vacuum Science Ltd
Development of Hinged Injection Mouldings for Folding Safety Helmets	Development - R & D Grant	HATPAC Limited
Thin Turntable Project	Micro - R & D Grant	Plough Team Ltd
Wear Measurement on Artificial Hip Joints	Research - R & D Grant	RedLux Ltd

Development of an Illuminator that is low-cost, sterilisable and disposable using a high intensity LED	Micro - R & D Grant	Omsbar Ltd
Optimised NMR Spectrometer Electronics: QXP	Micro - R & D Grant	Advanced Magnetic Resonance Ltd
A novel NDE system for crack detection	Micro - R & D Grant	PDS Engineering
Research into Data Storage Architectures to extend the Naked Objects Technology	Research - R & D Grant	Naked Objects Group Ltd
Modular Low-Weight Utility/Urban Vehicle	Research - R & D Grant	IQuad Technology Ltd
Wave DyVaR: An innovative Wave Energy Converter for use in the Renewable Energy market	Research - R & D Grant	IT Power Ltd
Helix Titanium road frame for a bicycle	Micro - R & D Grant	Omega Titanium Ltd
Process Intensification of Biodiesel Production Using Continuous OscillatoryFlow Reactors	Development - R & D Grant	MK BIODIESEL Ltd
Novel Electronic Shower Valve	Development - R & D Grant	EFC Ltd
Marker Point	Micro - R & D Grant	Stephen Gale Eng Tech MIPHE RP
Phuser	Micro - R & D Grant	Bluefire Systems Ltd
Quiescent Die Filling using the Direct Squeeze Casting Process	Research - R & D Grant	LAF Industries (UK) Ltd
A 3-in-1 Immunoassay test for the detection of Hormoconis resinae.	Development - R & D Grant	Conidia Bioscience Ltd
Development of an Oxygen Therapy Monitoring Device	Micro - R & D Grant	Oxymon Ltd
Tyre Pressure Measurement	Research - R & D Grant	WheelRight Ltd
Air bag cushioned anaesthesia, respiratory and facial protection masks	Development - R & D Grant	Euromoulds Ltd
Removal of oil from underground cables	Development - R & D Grant	AES Cables Ltd
Desalination of water using forward Osmosis	Micro - R & D Grant	Desalinate Ltd
Development of a new antibiotic that can kill MRSA	Research - R & D Grant	RecombinoGen Ltd
Manufacture of Blood Group A and B Antigens	Development - R & D Grant	Dextra Laboratories Limited
High Speed AFM: 'Scanning Tip Method'	Research - R & D Grant	Infinitesima Ltd
Computational Drug Discovery Product	Research - R & D Grant	Inhibox Limited
Talking Tour Guide	Micro - R & D Grant	Talking Products Ltd
Advanced adapters to integrate software systems	Development - R & D Grant	Connection Point Technology Ltd
Semi Industrial Pyrolysis Unit for use in the Municipal Waste Disposal	Research - R & D Grant	Morgan Everett Ltd

Concurrent Two-SIM Mobile Phones	Development - R & D Grant	Eisar Ltd
Automatic Paint Dispenser	Research - R & D Grant	Merris Development Engineers Ltd
In-Situ Fluid Condition Monitoring	Research - R & D Grant	Oxford RF Sensors Ltd
Computer Modelling & Cobination Cancer Therapy	Development - R & D Grant	Physiomics Plc
Development of the OneLook-a non-invasive diabetic glucose sensor	Development - R & D Grant	Lein Applied Diagnostics Ltd
Fork-Type Pallet-Lifting Device (Pallet Truck)	Micro - R & D Grant	Three in Two One Ltd
Use of Stressed Skin technology for a Light Aircraft Hangar	Research - R & D Grant	Airhangar Ltd
UV Curvable Ink Formulation and automated process for printing Braille to RNIB standards	Research - R & D Grant	Davison Chemographics
nClave	Development - R & D Grant	Mantis Deposition Ltd
Gas Recycler	Research - R & D Grant	Osmatic Systems Ltd
Research into the viability of manufacturing a low force (sub deci Newton) Loadcell	Research - R & D Grant	Novatech Measurements Ltd
MotorTag (2nd Application)	Development - R & D Grant	RFID Centre Ltd
Next generation laser micro-machining and nano fabrication systems	Research - R & D Grant	Rideo Systems Ltd
Innovative, retrofittable marine safety system	Research - R & D Grant	JBT Marine Ltd
Laser-Drilled Substrates for Fuel Cells	Development - R & D Grant	Ceres Power Ltd
Novel Bioprocessing Technology	Research - R & D Grant	EKB Technology
Innovative Voice-Processing Mehods & Systems for Commercial Telephone & Internet Applications	Development - R & D Grant	Synchro Arts Ltd
Automatic Switched Gain Amplifier	Micro - R & D Grant	KJC Microwaves Ltd
chemicals derived from sucrose (sugar)	Research - R & D Grant	Sebus Ltd
Linking of specific enzymes to DNA and Antibodies	Research - R & D Grant	Macro-Conex Ltd
Leg Blaster	Micro - R & D Grant	Complete Fitness Products
Improved rates of antifungal production for antifungal drugs	Research - R & D Grant	Hypha Discovery Ltd
Micro-Quell Drugs	Research - R & D Grant	Destiny Pharma Ltd
The Regenus	Micro - R & D Grant	Darwinian Software Ltd
Pressurised Oxygen Decomposition for Nuclear Decommissioning	Research - R & D Grant	Raddec Ltd

Reactive Cooling System	Development - R & D Grant	Cannon Technologies Ltd
Novel drug candidate for treating individuals with atopic dermatitis (Eczema)	Development - R & D Grant	Surface Therapeutics Ltd
Composite Transmission shafts	Development - R & D Grant	Crompton Technology Group Ltd
Cloud Cover	Micro - R & D Grant	Spice Application Systems Ltd
Mobile-3DTV	Research - R & D Grant	Ocuity Limited
TT Titanium-Based Composite Handlebar and Frameset	Micro - R & D Grant	Engenuity Ltd
Project Spiked	Research - R & D Grant	Virga Technologies Ltd
Renewable Zero-emissions Hydrogen	Research - R & D Grant	Hydrogen Solar Ltd
Firemote	Research - R & D Grant	Ryland Research Limited
Compression Bandaging	Micro - R & D Grant	Pres-Sure Medical Ltd
Custom made Orthoses	Research - R & D Grant	Newtrim (UK) Ltd
FTC Connection System	Development - R & D Grant	VerdErg Connectors Limited
One - Track	Research - R & D Grant	Veritas Logistics Limited
Asthma Alert Device	Research - R & D Grant	Anaxsys Technology Ltd (Formerly Asthma Alert)
Improving the design characteristics of the PerfectProbe system for gene quantification	Micro - R & D Grant	PrimerDesign Ltd
Develop a 'Pen type' handheld pc cursor	Development - R & D Grant	Makex Ltd
PodVert	Development - R & D Grant	WE7 (MediaGraft Ltd)
T System	Research - R & D Grant	Toximet Ltd
Multi-Layered UV Curable Organic Electronic Device	Research - R & D Grant	Polymertronics Limited
Intra-Nasal Device for an AIDs Vaccine	Research - R & D Grant	Alchemy Healthcare Ltd
Research use of Polysaccharide Fibrous material in medical treatment of chronic wounds	Research - R & D Grant	Sumed International (UK) Ltd
A New Machine for cryogenically preserving certain types of biological Tissue for medical use.	Research - R & D Grant	Planer PLC
Fuse: Virtual Training Environment Application	Micro - R & D Grant	Copia Ltd
Novel reconfigurable radio receiver architecture for wireless communications	Research - R & D Grant	RF Engines Ltd
Fluid Mask	Development - R & D Grant	Heligon Ltd
Portable charger for multiple hand held devices	Micro - R & D Grant	Juice Jack Ltd
New GrippingMechanism for a Deep Water Cut and Hold Grapnel	Research - R & D Grant	Ocean Cable Technologies Ltd
ODC Series Sanitizing Cabinet	Micro - R & D Grant	Onnic International Ltd

MRI System for imaging small animals with anaesthetic	Development - R & D Grant	Hallmarq Veterinary Imaging Ltd
Fuel Cell Manufacturing Process Development	Exceptional - R & D Grant (Dev 04/09)	Ceres Power Ltd
Filament Coating Process	Micro - R & D Grant	SS Scientific Ltd
Non Steroidal Anti-Inflammatory Drug (DCF100)	Development - R & D Grant	Futura Medical Developments Ltd
Research the use of composite materials to produce rapid composite tooling (RTC) for injection mould prototyping.	Research - R & D Grant	Gemini Prototyping Ltd
Interactive Mobile Personal Activity & Cost tracking	Research - R & D Grant	Optimor Ltd
Advanced Carbon Ceramics for braking Application	Research - R & D Grant	Huntercombe Consultancy Ltd
A Multi Parameter portable water testing digital laboratory	Development - R & D Grant	Wagtech International Ltd
3D Holographic Image Projector	Research - R & D Grant	Indepth Optics
Portable 10GHz Vector Network Analyser	Development - R & D Grant	LA Techniques Ltd
Prolonged Life Li-S Cells	Research - R & D Grant	Oxis Energy Ltd
Trailer Lighting Board	Micro - R & D Grant	The Lighting Board Company Ltd
1 Size - Advanced Windscreen wiper technology	Research - R & D Grant	OTM Servo Mechanism Ltd
WheelRight Development	Development - R & D Grant	WheelRight Ltd
High Resolution Imaging Module	Development - R & D Grant	Infinitesima Ltd
Online music recommendation engine	Micro - R & D Grant	Classical World Ltd
Wear Measurement on Artificial Hip Joints	Micro - R & D Grant	RedLux Ltd
Ultrasonic Electrochemical Reactor (UER)	Research - R & D Grant	Windsor Scientific Ltd
Protoype CHP Product Manufacture	Exceptional - R & D Grant (Dev 04/09)	Ceres Power Ltd
Infestation Free Japanese Anemone	Micro - R & D Grant	Fromefield Nurseries
Hydrogen Sulphide Absorber for the Green Energy Biogas Industry	Research - R & D Grant	Pptek Limited
Novel Low cost object detection sensor	Development - R & D Grant	Instro Precision Ltd
24-7 Box Micro Project	Micro - R & D Grant	24-7 Box Ltd
Development of Remote Handling attachment for Firemote for Handling Gas Cylinder Emergencies	Micro - R & D Grant	Ryland Research Limited
Live Fibres	Development - R & D Grant	HGRL Live Fibres Ltd

The First Automated Pharmaceutical Dispenser using Vibration Tray Feed Technology Suitable for Use with all Non-liquid Formulations	Development - R & D Grant	Electro-mec (Reading) Ltd
Modular fully integrated intelligent bar feed, component extraction and transportation system for soft and high integrity components	Development - R & D Grant	Hydrafeed Ltd
The Talking Walls - Beaulieu Abbey	Micro - R & D Grant	The Talking Walls (UK) Ltd
Development of a Deep Water Cut and Hold Grapnel for use in the Submarine Telecommunications Industry	Development - R & D Grant	Ocean Cable Technologies Ltd
A prototype for an improved system for HRM analysis	Research - R & D Grant	PrimerDesign Ltd
Detection Technology Kit for Genes and Proteins	Development - R & D Grant	Macro-Conex Ltd
Advanced Microbial Strains for Butanol Fermentation	Research - R & D Grant	Green Biologics Ltd
A Device for Producing Ultra Fine Ball Grid Array (UFBGA) Spheres	Research - R & D Grant	BizEsp Ltd
Silent Wind Turbine - Performance validation through field trials	Micro - R & D Grant	Luethi Enterprises Ltd
Multifunctional Composite Fuel Pipes for Next Generation Civil Aircraft	Development - R & D Grant	Crompton Technology Group Ltd
High Precision Lightweight Instrument for Balloon Carbon Dioxide Measurements	Research - R & D Grant	RedWave Labs Ltd
Research into a novel application of the 'Coanda' effect in metered dose inhalers for use in the pharmaceutical market	Research - R & D Grant	S&C Thermofluids Ltd
Development of the 'Swim Coach' watch	Micro - R & D Grant	Swimovate Ltd.
Sleepseat	Research - R & D Grant	Blue Sky Designers Ltd
To develop a multiplex collating machine for the printing industry	Micro - R & D Grant	Col-Tec (Solutions) Limited
Development of an UMTS open source M2M platform	Micro - R & D Grant	Eseye Ltd.
Research to produce a solar flue for use in the tent industry	Research - R & D Grant	3form Design
x:dis (Extended Distribution SME)	Development - R & D Grant	Actinic Software Limited
A Portable, Optical Tyre Inspection Device	Development - R & D Grant	Sigmavision Ltd
Capacity Tomography Based Wall Sensor	Micro - R & D Grant	Sensatech Research Ltd

Harness Release Box	Micro - R & D Grant	Stockbridge Racing Ltd.
Research into a Unified Internet-Protocol (IP) Communication Point	Research - R & D Grant	Televia Ltd
Low Cost Water Quality Sensor	Development - R & D Grant	Oxford RF Sensors Ltd
Development of a test for cotinine in saliva	Micro - R & D Grant	GFC Diagnostics Ltd.
Lung Cancer Screening Device (previously Asthma Alert)	Development - R & D Grant	Anaxsys Technology Ltd (Formerly Asthma Alert)
K Safety Cap for syringes	Development - R & D Grant	Star Syringe Ltd
Improved technique for assessing the cardiac risk of new drugs	Research - R & D Grant	Oxford Cardiac Pharmacology Ltd.
Development of a light, fold flat, wheel free trailer	Micro - R & D Grant	From Mind to Matter Ltd
"Osprey" flaw detector instrument	Development - R & D Grant	Sonatest Ltd
Starman - electronic device to interface with any Personal Digital Assistant (PDA)	Development - R & D Grant	GBE Designs Ltd.
Feasibility of creating an accurate RF location system based on time-of-flight signals	Research - R & D Grant	ASH Communications Ltd.
TRU and TC design and build	Micro	Red Box International Ltd.
Robotic actuator	Micro - R & D Grant	MA Systems & Control Ltd
Development of Surface Acoustic Wave and high torque Synchro-ring technologies	Development - R & D Grant	Yellowfin Ltd
To investigate the feasibility of creating electrostatic liquids and delivery methods for sanitisation technologies	Research - R & D Grant	Atrium Innovation Ltd.
SMART Flood Protection	Research - R & D Grant	Eco Coverage Technologies Ltd
Duo-Drive - hybrid vehicle development	Development - R & D Grant	Evo Electric Ltd.
Management and control of alarm floods	Research - R & D Grant	Curvaceous Software Ltd
Bladder scanning sensor	Development - R & D Grant	Sequoia Technologies Ltd.
Hygienic handle development	Micro - R & D Grant	Brookson (5650L) Ltd.
Sigma Reactive (SR) fire detection	Development - R & D Grant	Kentec Electronics Ltd.
Development of a high speed pill deblistering prototype	Micro - R & D Grant	The Poppitts Co Ltd
Sleepseat	Research - R & D Grant	Blue Sky Designers Ltd
Development phase of advanced windscreen wiper technology	Development - R & D Grant	OTM Servo Mechanism Ltd
Development of an Intra-nasal Medicines Delivery Device	Development - R & D Grant	Alchemy Healthcare Ltd

Energy-efficient storage for data centres	Development - R & D Grant	Acunu Ltd.
To create an isolation valve for plumbing applications and pipe sizes that allow for pipe repairs and modification without disruption in flow.	Research - R & D Grant	Wealden Designs Ltd.
Self sterilising toilet	Research - R & D Grant	Silicon Project Innovations Ltd
Development of RIDL in Aedes albopictus	Development - R & D Grant	Oxitec Limited
Airspace safety and risk assessment system	Development - R & D Grant	Surespace Ltd.
Ultra low power radio architecture for use in wireless sensor networks	Research - R & D Grant	Cascoda Ltd
PassivLiving - an integrated services platform for the home	Development - R & D Grant	PassivSystems Ltd.
Prototypes of Liquidus Tracker	Development - R & D Grant	Planer PLC
Low cost rugged router	Proof Of Market	Case Communications Ltd
Microwave ozone generation	Research - R & D Grant	Jenton International Ltd
Real time motion capture in real world scenarios	Research - R & D Grant	Real Time Tracking Ltd
3D Wound measurement device	Development - R & D Grant	Eykona Technologies Ltd
Small drilling tool for hard materials	Research - R & D Grant	Hightown Engineering Ltd
Electric induction heating for organic synthesis	Research - R & D Grant	Librarian Ltd
Bench top MRI system for study of transgenic mice	Development - R & D Grant	MR Solutions Ltd
Feasibility of a novel low power and compact scintillation counter	Research - R & D Grant	Symetrica Security Ltd (previously Symetrica Ltd)
Development of Dielectrophoresis Technology	Development - R & D Grant	Labtech International Ltd
Compact superconducting magnet for a bench-top flow NMR spectrometer	Development - R & D Grant	Matrix Magnets Ltd
Smart Reamer Drilling System	Research - R & D Grant	Smart Reamer Drilling Systems Ltd
Multi-needle fuel injector for an ultra-efficient diesel engine	Research - R & D Grant	Cox Powertrain Ltd
Ammonia Project	Development - R & D Grant	Bedfont Scientific Limited
Constellation - Biotech proof of Market study	Proof Of Market	Constellation Technologies Ltd
Inside Track online business services and tools	Proof Of Market	Larato Ltd
Energy Harvester for low speed air-flows	Research - R & D Grant	D4 Technology Ltd
Development of a unified, internet protocol communications point	Development - R & D Grant	Televia Ltd
Innovative optoelectronic sensors & modelling software	Research - R & D Grant	Lindsay Golf Limited

Investigation of spatially offset raman spectroscopy for identifying unknown materials in containers	Research - R & D Grant	Cobalt Light Systems Ltd
Completion of data package to out-license novel anticancer compound	Development - R & D Grant	Hypha Discovery Ltd
Dataslide Integrated Technology Demonstrator Development	Research - R & D Grant	Dataslide (UK) LLP
Startitle	Development - R & D Grant	Starfish Technologies Ltd
Sleepseat development	Development - R & D Grant	Blue Sky Designers Ltd
LTE RF Transceiver	Research - R & D Grant	Genasic Design Systems Ltd
InAngel	Development - R & D Grant	Intelligent Network Ltd
Downsized series hybrid power train with an auxiliary power take off facility	Research - R & D Grant	Hyperdrive Technologies Ltd
CommandLink	Development - R & D Grant	VectorCommand Ltd
Truck Fuel Monitor Project	Micro - R & D Grant	Avelec Ltd
Curing Bladder	Research - R & D Grant	JNDC Ltd
CAL Vision System	Development - R & D Grant	OXFORD SENSOR TECHNOLOGY LTD
Continuous Vital Signs Monitoring	Development - R & D Grant	The Wandsworth Group Ltd
BSL Proof of Concept	Research - R & D Grant	Bio-Sep Limited
Next generation Inter-alloy Welding Process	Research - R & D Grant	Allectra Ltd
ULTRaMo Engine	Research - R & D Grant	ULTRaMo Ltd

Grant Offered	Offer Letter Date	Project Completion Date
20,000	10-Jun-05	31-May-06
51,262	01-Aug-05	22-Aug-06
20,000	04-Aug-05	31-Jan-06
154,891	04-Aug-05	30-Apr-07
15,606	10-Aug-05	07-May-06
27,180	10-Aug-05	03-Oct-05
75,000	10-Aug-05	30-Apr-06
20,000	12-Aug-05	03-Mar-06
42,059	12-Aug-05	30-Sep-06
75,000	12-Aug-05	01-Sep-06
20,000	12-Aug-05	31-Mar-06
75,000	15-Aug-05	12-Sep-06
20,000	22-Aug-05	15-Aug-06
173,880	26-Aug-05	09-Jun-06
20,000	26-Aug-05	30-Aug-06
45,380	31-Aug-05	31-May-06
60,000	02-Sep-05	28-Feb-07
75,000	08-Sep-05	31-May-06
75,660	26-Sep-05	16-Apr-07
20,000	17-Oct-05	16-Sep-06

75,000	17-Oct-05	31-Jul-06
497,756	17-Oct-05	01-Dec-08
67,602	17-Oct-05	30-Jan-07
80,264	18-Oct-05	09-Aug-06
18,077	20-Oct-05	31-Jul-06
190,660	26-Oct-05	23-Apr-07
74,341	09-Nov-05	06-Oct-06
20,000	10-Nov-05	30-Sep-06
198,826	14-Nov-05	30-May-07
75,000	15-Nov-05	30-Jun-06
20,000	24-Nov-05	30-Nov-06
188,289	29-Nov-05	01-Jan-08
75,000	29-Nov-05	02-Jul-07
33,417	30-Nov-05	28-Sep-06
24,728	01-Dec-05	20-Aug-06
56,952	05-Dec-05	02-Oct-06
59,121	06-Dec-05	02-Jul-07
69,302	15-Dec-05	31-Aug-06
20,000	15-Dec-05	30-Sep-06
65,490	21-Dec-05	02-Jul-07

20,000	10-Jan-06	08-Aug-06
20,000	10-Jan-06	20-Feb-07
12,505	23-Jan-06	05-Feb-07
75,000	23-Jan-06	01-Mar-07
75,000	23-Jan-06	17-Jan-07
61,227	06-Feb-06	13-Jan-07
12,553	09-Feb-06	07-Jun-06
172,826	13-Feb-06	15-Jan-07
28,826	14-Feb-06	28-Aug-06
10,000	20-Feb-06	25-Sep-06
20,000	23-Feb-06	11-Sep-06
51,544	01-Mar-06	20-Jan-07
73,877	08-Mar-06	01-Mar-08
20,000	09-Mar-06	14-Mar-07
75,000	09-Mar-06	31-Dec-06
85,343	13-Mar-06	08-Feb-07
53,010	20-Mar-06	20-Dec-06
20,000	20-Mar-06	12-Jun-06
74,973	27-Mar-06	28-Oct-06
42,220	31-Mar-06	01-Oct-07
75,000	31-Mar-06	17-Apr-07
70,950	31-Mar-06	31-Aug-07
10,000	10-Apr-06	31-Jul-06
42,392	20-Apr-06	31-Mar-07
75,000	24-Apr-06	03-Oct-06

177,602	10-May-06	31-Jan-07
75,000	10-May-06	29-May-07
70,048	11-May-06	19-Dec-06
63,828	15-May-06	24-Apr-07
134,489	26-May-06	22-Feb-07
12,050	31-May-06	11-Oct-06
38,145	05-Jun-06	30-Mar-07
58,651	07-Jun-06	05-Feb-07
66,955	19-Jun-06	31-Dec-07
68,160	20-Jun-06	02-Apr-07
62,088	20-Jun-06	02-Sep-07
174,890	30-Jun-06	02-Jun-08
74,664	01-Jul-06	31-Dec-07
65,112	05-Jul-06	06-Apr-07
200,000	06-Jul-06	26-Dec-07
75,000	07-Jul-06	20-Jul-07
64,010	12-Jul-06	06-Jul-07
7,189	12-Jul-06	09-Apr-07
47,432	04-Aug-06	07-Apr-07
54,972	10-Aug-06	30-Sep-07
2,500	11-Aug-06	15-Feb-07
72,760	14-Aug-06	31-Jan-08
63,960	15-Aug-06	14-Aug-07
20,000	17-Aug-06	03-Sep-07
71,940	18-Aug-06	01-Oct-07

191,450	29-Aug-06	01-Oct-07
194,566	29-Aug-06	27-Dec-08
199,994	11-Sep-06	01-Oct-08
20,000	13-Sep-06	11-Sep-07
75,000	15-Sep-06	15-Apr-08
19,280	29-Sep-06	31-Dec-06
75,000	02-Oct-06	31-Oct-07
72,217	02-Oct-06	05-May-08
35,082	04-Oct-06	24-Jun-07
20,000	04-Oct-06	02-Oct-07
68,945	12-Oct-06	10-Oct-07
200,000	31-Oct-06	30-Nov-07
75,000	07-Nov-06	29-Oct-07
74,272	27-Nov-06	01-Nov-07
16,270	29-Nov-06	02-Jul-07
76,419	07-Jan-07	14-Nov-07
168,370	08-Jan-07	14-Mar-08
53,998	11-Jan-07	07-Jan-08
75,000	15-Jan-07	31-Oct-07
44,976	05-Feb-07	30-Jan-08
75,000	06-Feb-07	22-Oct-07
75,000	07-Feb-07	02-Mar-09
20,000	14-Feb-07	01-Aug-07
61,094	22-Feb-07	28-Feb-08
200,000	01-Mar-07	30-Jun-08
20,000	22-Mar-07	02-Sep-07
44,442	23-Mar-07	01-Jan-08
7,130	27-Mar-07	12-Oct-07

121,415	16-Apr-07	30-Apr-08
500,000	16-Apr-07	03-Apr-09
15,367	23-Apr-07	30-Apr-08
200,000	22-May-07	26-Apr-10
75,000	25-May-07	31-May-08
75,000	01-Jun-07	10-Apr-08
75,000	04-Jun-07	19-May-08
194,000	04-Jun-07	03-Jun-08
75,000	09-Jul-07	11-Aug-08
43,841	27-Jul-07	31-Jul-08
75,000	30-Jul-07	02-Jul-08
18,850	14-Aug-07	02-Mar-08
75,000	23-Aug-07	30-Sep-08
200,000	29-Aug-07	02-Sep-08
169,331	31-Aug-07	02-Sep-08
20,000	05-Sep-07	23-Sep-07
19,430	28-Sep-07	01-May-08
75,000	10-Oct-07	04-Feb-09
500,000	17-Oct-07	01-Nov-09
20,000	17-Oct-07	17-Dec-08
54,120	01-Nov-07	19-Nov-08
181,936	05-Nov-07	15-Nov-08
19,530	21-Dec-07	28-Feb-09
20,000	21-Dec-07	30-Jun-08
154,000	30-Jan-08	13-Jan-11

35,255	13-Feb-08	18-Aug-08
179,103	14-Feb-08	03-Mar-10
19,642	27-Feb-08	05-Dec-08
44,571	06-Mar-08	05-Nov-08
31,718	15-Mar-08	15-Sep-08
90,010	20-Mar-08	01-Apr-10
75,000	21-Mar-08	01-Oct-09
100,000	28-Mar-08	31-Mar-09
20,000	10-Apr-08	21-Apr-09
213,895	21-Apr-08	03-May-10
74,985	28-Apr-08	14-Nov-09
39,398	11-Jun-08	01-Apr-09
19,620	18-Jun-08	31-Jul-09
75,000	26-Jun-08	30-Apr-09
20,000	03-Jul-08	04-Dec-08
20,000	25-Jul-08	11-Feb-09
47,341	30-Jul-08	04-Aug-08
150,641	18-Aug-08	30-Nov-09
59,318	20-Aug-08	20-Oct-09
17,229	26-Aug-08	26-Aug-09

8,834	08-Sep-08	08-Apr-09
95,380	11-Sep-08	30-Jun-09
163,753	15-Sep-08	13-May-10
20,000	18-Sep-08	22-Sep-09
220,242	16-Oct-08	20-Oct-09
155,211	05-Nov-08	09-Feb-10
84,221	01-Dec-08	31-May-10
20,000	15-Dec-08	15-May-09
250,000	22-Dec-08	03-Jan-11
22,546	02-Feb-09	31-Dec-09
100,000	16-Feb-09	15-Nov-09
20,000	16-Feb-09	13-Nov-09
20,000	23-Feb-09	30-Sep-09
234,350	15-Mar-09	28-Dec-09
94,000	17-Mar-09	17-Mar-10
78,256	03-Apr-09	31-Aug-10
237,895	06-Apr-09	31-Oct-10
100,000	20-Apr-09	30-Apr-10
234,926	30-Apr-09	30-Apr-11
18,458	30-Apr-09	01-Mar-10
225,856	08-May-09	31-Oct-10
20,000	15-May-09	30-Nov-09
100,000	15-May-09	30-Nov-09
140,879	22-May-09	01-Jun-11
145,530	22-May-09	31-Jul-10

67,592	17-Jun-09	01-Mar-10
70,577	18-Jun-09	01-Jul-10
41,100	19-Jun-09	30-Mar-10
39,500	07-Jul-09	31-Jan-10
77,000	09-Jul-09	31-Mar-10
60,305	16-Jul-09	20-Jul-10
250,000	22-Jul-09	15-Jul-10
43,380	17-Aug-09	30-Apr-11
19,795	08-Sep-09	30-Nov-09
54,561	08-Sep-09	01-Oct-10
100,000	25-Sep-09	30-Apr-10
193,875	28-Sep-09	31-Aug-10
38,736	07-Oct-09	31-Mar-11
51,480	07-Oct-09	01-Oct-10
111,047	13-Oct-09	30-Sep-10
81,600	13-Oct-09	01-Nov-10
220,000	13-Nov-09	30-Nov-11
52,150	27-Nov-09	30-Jun-11
81,069	07-Dec-09	30-Jun-11
100,000	07-Dec-09	30-Jun-10
82,800	07-Dec-09	01-Apr-11
19,980	14-Dec-09	14-May-10
20,000	21-Dec-09	12-Mar-10
58,500	14-Jan-10	31-Jan-11
154,661	03-Feb-10	30-Nov-10
100,000	15-Feb-10	01-Feb-11

100,000	19-Feb-10	30-Apr-11
53,333	10-Mar-10	01-Dec-10
87,840	18-Mar-10	31-Oct-10
212,106	24-Mar-10	31-Mar-12
222,444	08-Apr-10	31-Mar-11
100,000	19-Apr-10	10-Jan-11
139,296	22-Apr-10	31-Jul-11
47,744	27-Apr-10	30-Nov-10
250,000	29-Apr-10	30-Nov-11
18,963	18-Aug-10	01-Mar-11
70,546	23-Aug-10	31-Mar-11
46,716	25-Aug-10	31-Mar-11
118,115	25-Aug-10	31-Mar-11
100,000	27-Aug-10	31-Mar-11
80,720	27-Aug-10	31-Mar-11
88,740	01-Sep-10	15-Mar-11