

4 Documents

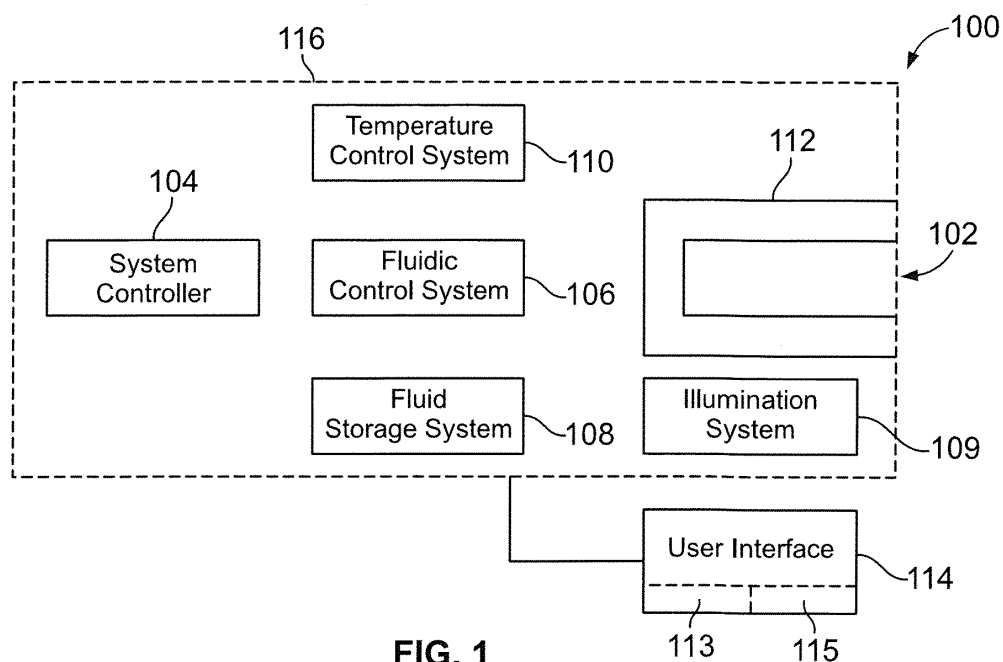
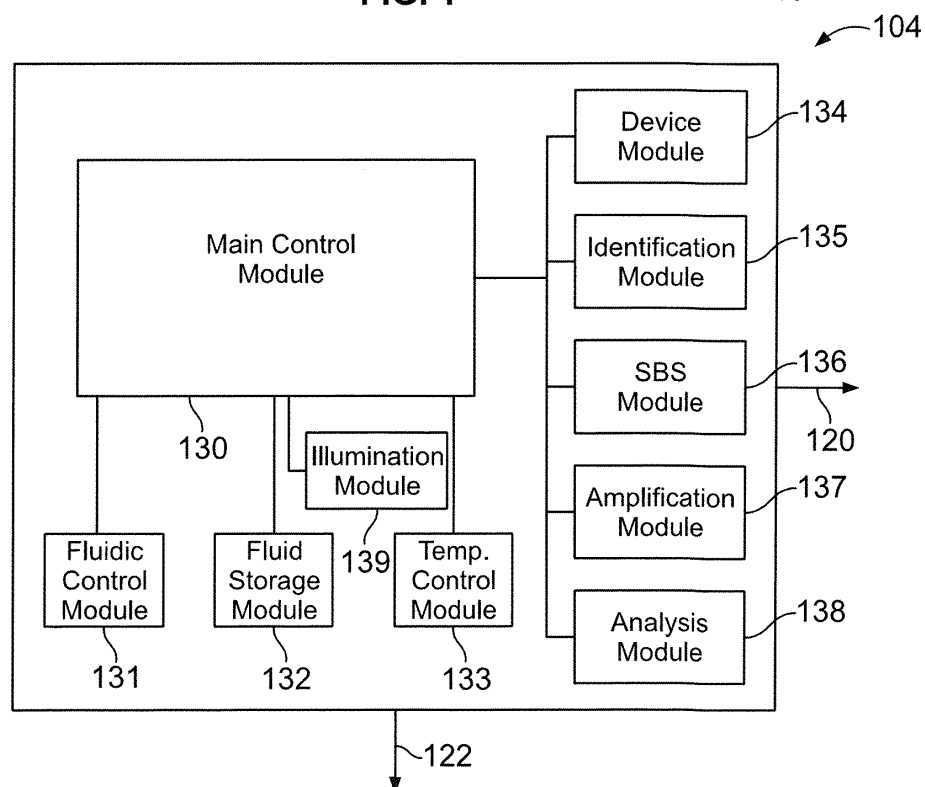
Publication numbers	Title	Current assignees
US20180341649 A1	Biosensors for biological or chemical analysis and systems and methods for same	INC NEC LABORATORIES AMERICA, ...
EP3668651 A1	Scanning apparatus and methods useful for detection of chemical and biological analytes	OMNIOME
EP2625526 A2	Systems and methods for automated reusable parallel biological reactions	GENAPSYS
EP2714935 A2	Systems and methods for genetic and biological analysis	GENAPSYS

Family 1/4 - FAMPAT - ©Questel

Title

(US20180341649)

Biosensors for biological or chemical analysis and systems and methods for same

Images**FIG. 1****FIG. 2****Publication numbers with kind code & date**

US20180341649	A1	2018-11-29	US20180341649
US9990381	B2	2018-06-05	US9990381
US9020901	B2	2015-04-28	US9020901
US20150079596	A1	2015-03-19	US20150079596



[US8906320](#)

B1

2014-12-09

US8906320

[US20130275382](#)

A1

2013-10-17

US20130275382

Abstract

(US20180341649)

A biosensor is provided including a detection device and a flow cell mounted to the detection device. The detection device has a detector surface with a plurality of reaction sites. The detection device also includes a filter layer that is configured to at least one of (a) filter unwanted excitation light signals; (b) direct emission signals from a designated reaction site toward one or more associated light detectors that are configured to detect the emission signals from the designated reaction site; or (c) block or prevent detection of crosstalk emission signals from adjacent reaction sites.

Inventors

ELTOUKHY HELMY A

KAIN ROBERT C

FENG WENYI

PRATT MARK

HIRSCHBEIN BERNARD

SABOUNCHI POORYA

Latest standardized assignees - inventors removed

INC NEC LABORATORIES AMERICA

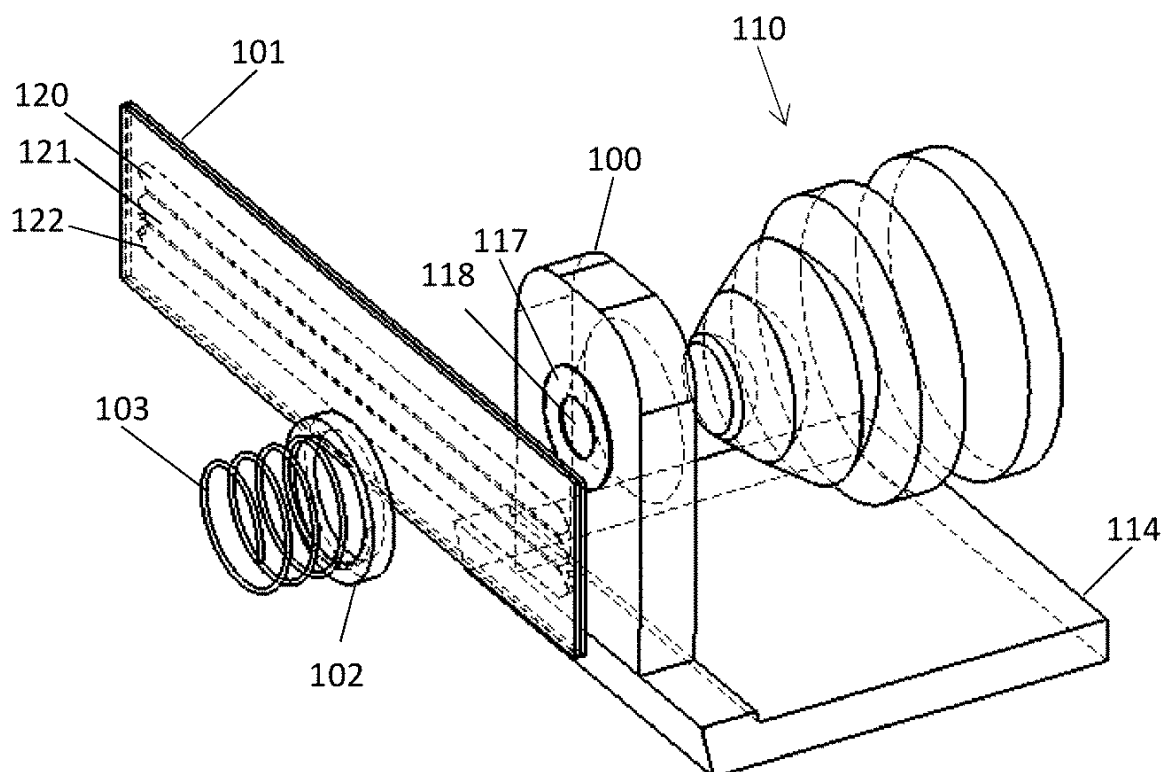
NEC

Family 2/4 - FAMPAT - ©Questel

Title

(EP3668651)

Scanning apparatus and methods useful for detection of chemical and biological analytes

Images**Publication numbers with kind code & date**[BR112020003229](#)

A2

2020-08-18

BR112020003229

[KR10-2020-0075814](#)

A

2020-06-26

KR20200075814

[EP3668651](#)

A1

2020-06-24

EP3668651

CN111182972	A	2020-05-19	CN111182972				
IN202047009469	A	2020-03-13	IN202047009469				
BR112020003229	A1	2020-02-27	BR112020003229				
SG11202000964U	A	2020-02-27	SG11202000964U				
US20200063201	A1	2020-02-27	US20200063201				
AU2018317826	A1	2020-02-20	AU2018317826				
US10501796	B2	2019-12-10	US10501796				
CA3072136	A1	2019-02-21	CA3072136				
US20190055596	A1	2019-02-21	US20190055596				
US20190055598	A1	2019-02-21	US20190055598				
WO2019/035897	A1	2019-02-21	WO201935897				

Abstract

(EP3668651)

An apparatus can include a vessel, a reference surface, a preload, a scan actuator, and a transmitter. The reference surface can form a structural loop with a detector. The preload can be configured to urge the vessel to contact an area on the reference surface. The scan actuator can be configured to slide the vessel along the reference surface in a scan dimension. The transmitter can be configured to direct signal from the vessel to a detector and/or direct energy from an energy source to the vessel, when the vessel is urged by the preload to contact the reference surface.

Inventors

ERICKSTAD MICHAEL JOHN

MCGINLEY REBECCA

NEMIROSKI ALEX

RAPOPORT HARRY SCOTT

OLIPHANT ARNOLD

BUERMANN DALE

Latest standardized assignees - inventors removed

OMNIOME

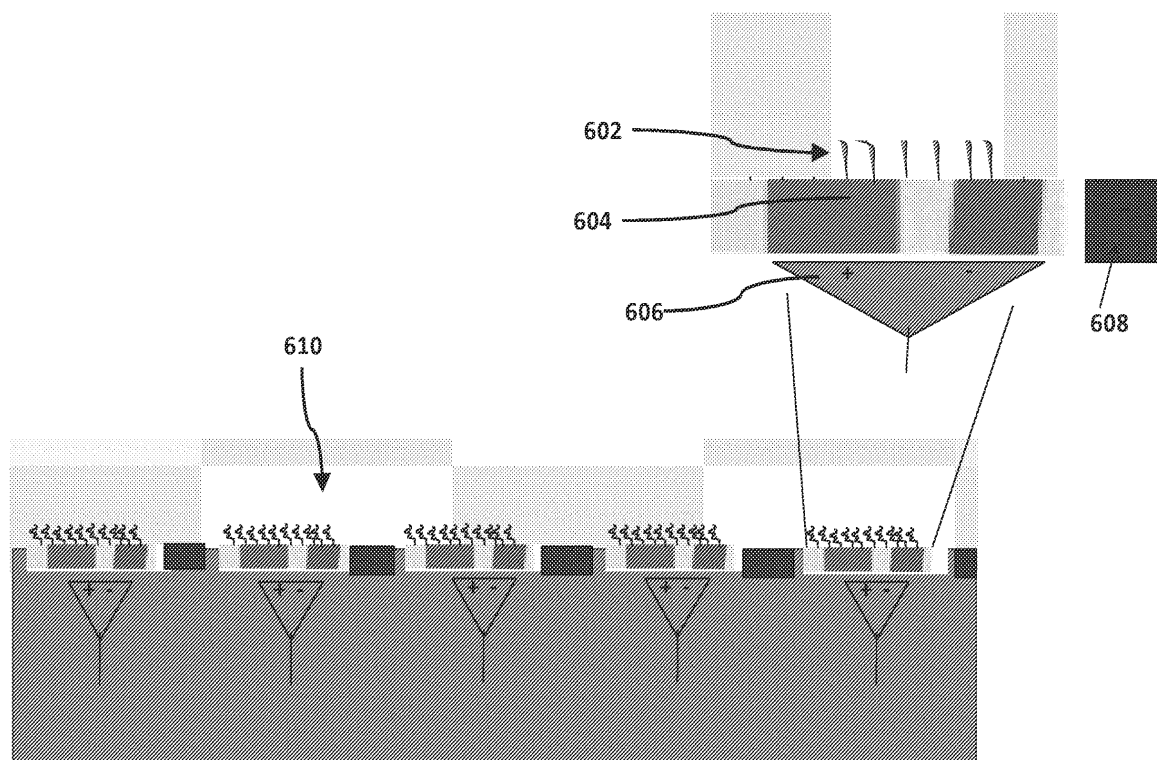
Family 3/4 - FAMPAT - ©Questel

Title

(EP2625526)

Systems and methods for automated reusable parallel biological reactions

Images



Publication numbers with kind code & date

US20190226021	A1	2019-07-25	US20190226021
KR10-1963462	B1	2019-03-28	KR101963462
IL225558	B	2018-12-31	IL-225558
US10100356	B2	2018-10-16	US10100356
CN103328981	B	2017-04-12	CN103328981B
JP6114694	B2	2017-04-12	JP6114694
EP2625526	B1	2017-03-15	EP2625526
US20170065977	A1	2017-03-09	US20170065977
MX344363	B	2016-12-14	MX-344363
US9399217	B2	2016-07-26	US9399217
US20160108469	A9	2016-04-21	US20160108469
US20160076097	A1	2016-03-17	US20160076097
US9187783	B2	2015-11-17	US9187783
AU2011312218	B2	2015-11-05	AU2011312218
GB2499340	B	2015-10-28	GB2499340
NZ610129	A	2014-08-29	NZ-610129
HK1188614	A1	2014-05-09	HK1188614
EP2625526	A4	2014-04-09	EP2625526
KR20140027906	A	2014-03-07	KR20140027906
US20140045701	A1	2014-02-13	US20140045701
MX2013003860	A	2013-11-04	MX2013003860
JP2013539978	A	2013-10-31	JP2013539978
CN103328981	A	2013-09-25	CN103328981
EP2625526	A2	2013-08-14	EP2625526
GB2499340	A	2013-08-14	GB2499340
SG189839	A1	2013-06-28	SG-189839
IL225558	A	2013-06-27	IL-225558
GB201308138	D0	2013-06-12	GB201308138
AU2011312218	A1	2013-05-30	AU2011312218
US20130034880	A1	2013-02-07	US20130034880



[WO2012/047889](#)

A3

2012-07-12

WO201247889

[WO2012/047889](#)

A2

2012-04-12

WO201247889

Abstract

(EP2625526)

A method comprises magnetically holding a bead carrying biological material (e.g., nucleic acid, which may be in the form of DNA fragments or amplified DNA) in a specific location of a substrate, and applying an electric field local to the bead to isolate the biological material or products or byproducts of reactions of the biological material. For example, the bead is isolated from other beads having associated biological material. The electric field in various embodiments concentrates reagents for an amplification or sequencing reaction, and/or concentrates and isolates detectable reaction by-products. For example, by isolating nucleic acids around individual beads, the electric field can allow for clonal amplification, as an alternative to emulsion PCR. In other embodiments, the electric field isolates a nanosensor proximate to the bead, to facilitate detection of at least one of local pH change, local conductivity change, local charge concentration change and local heat. The beads may be trapped in the form of an array of localized magnetic field regions.

Inventors

ESFANDYARPOUR HESAAM

PARIZI KOSAR B

NORDMAN ERIC S

OLDHAM MARK F

Latest standardized assignees - inventors removed

GENAPSYS

Family 4/4 - FAMPAT - ©Questel

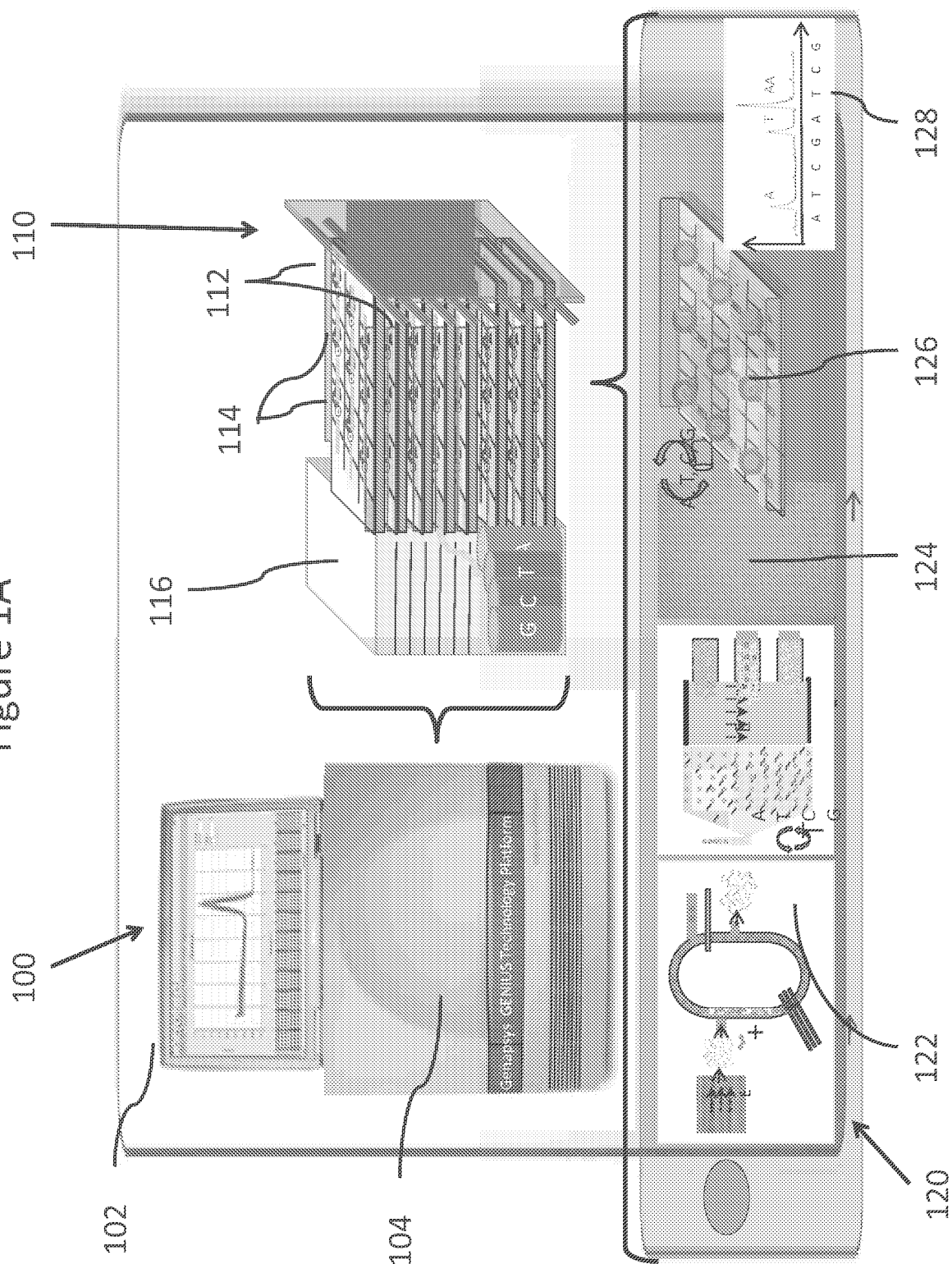
Title

(EP2714935)

Systems and methods for genetic and biological analysis

Images

Figure 1A



Publication numbers with kind code & date

US10787705	B2	2020-09-29	US10787705
US20200255893	A1	2020-08-13	US20200255893
US10612091	B2	2020-04-07	US10612091
US10494672	B2	2019-12-03	US10494672
US10472674	B2	2019-11-12	US10472674
US20190177790	A1	2019-06-13	US20190177790
US20190177791	A1	2019-06-13	US20190177791
US10266892	B2	2019-04-23	US10266892
US10260095	B2	2019-04-16	US10260095
KR10-1940833	B1	2019-01-21	KR101940833
US20180327837	A1	2018-11-15	US20180327837
US20180282805	A1	2018-10-04	US20180282805



US20180282805	A1	2018-10-04	US20180282805				
US20180282806	A1	2018-10-04	US20180282806				
US20180245150	A1	2018-08-30	US20180245150				
US9926596	B2	2018-03-27	US9926596				
US20180051332	A9	2018-02-22	US20180051332				
US20170073750	A1	2017-03-16	US20170073750				
EP2714935	B1	2017-03-15	EP2714935				
US9533305	B2	2017-01-03	US9533305				
CN103717753	B	2016-12-07	CN103717753B				
JP5982472	B2	2016-08-31	JP5982472				
AU2012262364	B2	2016-02-11	AU2012262364				
US20150368707	A1	2015-12-24	US20150368707				
US9150915	B2	2015-10-06	US9150915				
US20150148264	A1	2015-05-28	US20150148264				
US8969002	B2	2015-03-03	US8969002				
EP2714935	A4	2015-01-21	EP2714935				
US20140235457	A1	2014-08-21	US20140235457				
JP2014518633	A	2014-08-07	JP2014518633				
KR20140044342	A	2014-04-14	KR20140044342				
CN103717753	A	2014-04-09	CN103717753				
EP2714935	A2	2014-04-09	EP2714935				
AU2012262364	A8	2014-02-27	AU2012262364				
AU2012262364	A1	2014-01-23	AU2012262364				
WO2012/166742	A3	2013-04-25	WO2012166742				
US20130096013	A1	2013-04-18	US20130096013				
CA2837486	A1	2012-12-06	CA2837486				
WO2012/166742	A2	2012-12-06	WO2012166742				

Abstract

(EP2714935)

The invention relate to systems and methods for sequencing polynucleotides, as well as detecting reactions and binding events involving other biological molecules. The systems and methods may employ chamber-free devices and nanosensors to detect or characterize such reactions in high-throughput. Because the system in many embodiments is reusable, the system can be subject to more sophisticated and improved engineering, as compared to single use devices.

Inventors

ESFANDYARPOUR HESAAM

BAGHBANI PARIZI KOSAR

OLDHAM MARK F

NORDMAN ERIC S

REEL RICHARD T

BAUMHUETER SUSANNE

HEINER CHERYL

LEE FRANK

Latest standardized assignees - inventors removed

GENAPSYS