

**Berkeley Lab Royalty Recipients
February 19, 2014**

Licensee/Inventor(s)	Technology Description	Inventor Division(s) *lead division
Aeroseal Carrié, Francois (Remi) J. Modera, Mark P. Wang, Duo	Duct sealing technology to save energy losses from building HVAC systems	Environmental Energy
Alphabet Energy, Inc. Chen, Renkun Diaz-Delgado, Raul Hochbaum, Allon I. Majumdar, Arunava Yang, Peidong	Thermoelectrics to transform waste heat (e.g. from engines and furnace exhaust) into electricity	Materials Sciences
Artery Therapeutics Bielicki, John K. Johansson, Jan Natarajan, Pradeep	ApoA-I peptide mimetics for cardiovascular disease treatment	Life Sciences
Berkeley Heart Lab Quest Diagnostics Benner, W. Henry Blanche, Patricia J. Krauss, Ronald M. Orr, Joseph R.	Complete cholesterol tests for more accurate coronary artery disease risk assessment	Engineering Life Sciences*
Canarm Ltd. Vaxcel International Gauna, Kevin Page, Erik Siminovitch, Michael J.	High efficiency, hybrid LED/incandescent security lighting	Environmental Energy
Cell Signaling Technology Sigma Chemical Campisi, Judith Dimri, Goberdhan P. Peacocke, Monica	Reagents used in cell senescence research	Life Sciences
Centocor Daiichi Sankyo Narla, Mohandas Paszty, Chris Rubin, Edward M.	Mouse models for sickle cell disease research	Life Sciences
Cepheid Enache, Oana Gray, Joe W Griffith, Obi Lee Pepin, Francois Spellman, Paul T	Biomarkers to determine likelihood of breast cancer recurrence	Life Sciences
Digirad Fairchild Imaging Hamamatsu Photonics	Fully depleted back illuminated charge-coupled device (CCD) for use in medical imaging and in telescopes	Engineering

Holland, Stephen E.		
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European Synchrotron Radiation Facility Merck Sauter, Nicholas K.	LABELIT software, for expedited x-ray diffraction image processing	Physical Biosciences
eV Products Portable Technologies Luke, Paul N.	Technology to improve resolution of radiation detectors	Engineering
Evolva Biotech A/S Loque, Dominique Yang, Fan Zheng, Kejian	Plant gene library used to increase production of biosynthetic products	Physical Biosciences
Fluigence, LLC Geiger, Emil J. Mair, Dieudonne A.	Specialized microfluidic chips	Physical Biosciences
Fluorescence Innovations Kleinfelder, Stuart	Integrated circuit technology for biotech instruments	Engineering
Fi-Foil Company Arasteh, Dariush K. Griffith, Brent T. Selkowitz, Stephen E.	High insulating gas-filled panels	Environmental Energy
GeneDx Pennacchio, Len A.	Genetic identification of Noonan syndrome	Genomics
Home Energy Saver APIs Bauer, Tim Brown, Richard E. Coughlin, Katie Mills, Evan Pinckard, Margaret J. Warner, Jeffrey L. Webster, Sam	Software to determine energy-saving upgrades for homeowners	Environmental Energy
Layne Christensen Doughty, Christine Hale, Frank V. Tsang, Chin-Fu	Wellbore software to characterize groundwater contamination	Earth Sciences
Life Technologies, Inc. Brennan, Thomas	Reagents and lab instruments	Engineering
Maxon Cheng, Robert K. Yegian, Derek	Low NOx, low CO emission industrial burner	Environmental Energy
Mobotec USA Chang, Shih-Ger (Ted) Liu, Shou-heng Liu, Zhao-rong Yan, Naiqiang	Pollutant control for coal-fired power plant flue gas	Environmental Energy

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<p>Nanosys</p> <p>Alivisatos, Paul Bruchez, Marcel Colvin, Vicki L. Dittmer, Janke J. Goldstein, Avery N. Huynh, Wendy U. Li, Liang-shi Manna, Liberato Milliron, Delia J. Olshavsky, Michael A. Peng, Xiaogang Rockenberger, Joerg Scher, Erik C. Schlamp, Michael C. Weiss, Shimon</p>	<p>Quantum dots for brighter, more vibrant smart phone, tablet and television color displays</p>	<p>Materials Sciences</p>
<p>Novartis Takeda California</p> <p>Cornell, Earl W. Jaklevic, Joseph M. Jin, Jian Jones, Arthur L. Kolbe, William F. Nordmeyer, Robert A. Santarsiero, Bernard D. Schultz, Peter G. Stevens, Raymond Uber, Donald Yegian, Derek</p>	<p>Robotics for rapid protein crystallization, for drug discovery</p>	<p>Engineering Materials Sciences* Physical Biosciences</p>
<p>OPX Biotechnologies</p> <p>Fortman, Jeffrey L. (Clem) Katz, Leonard Keasling, Jay D Steen, Eric J.</p>	<p>Fatty acid and alpha olefin production technologies enabling bio-based chemicals</p>	<p>Physical Biosciences</p>
<p>PHENIX Consortium</p> <p>Adams, Paul D. Afonine, Pavel V. Echols, Nathaniel Grosse-Kunstleve, Ralf W. Hedd, Jeffrey J. Moriarty, Nigel W. Sauter, Nicholas K. Zwart, Petrus</p>	<p>Software suite automating macromolecular crystallography, for pharmaceutical and biotech R&D</p>	<p>Physical Biosciences</p>

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QDot/Life Technologies Alivisatos, Paul Bruchez, Marcel Colvin, Vicki L. Goldstein, Avery N. Manna, Liberato Olshavsky, Michael A. Peng, Xiaogang Weiss, Shimon	Quantum dots for fluorescence probes for biomedical assays	Materials Sciences
Quanex Building Product Corp. Arasteh, Dariush K. Curcija, Dragan (Charlie) Finlayson, Elizabeth Huizenga, Charles Kohler, Christian Mitchell, Robin Rubin, Michael D. Zhu, Ling	Window modeling software to improve building energy efficiency	Environmental Energy
Seeo, Inc. Balsara, Nitash P. Eitouni, Hany B. Gomez, Enrique D. Singh, Mohit	Safer, high energy lithium ion batteries	Environmental Energy* Materials Sciences
Shimadzu Koike, Masato	Holographic gratings technology	Advanced Light Source
Soladigm (View, Inc.) Richardson, Thomas J.	Energy efficient window technology	Environmental Energy
TeselaGen Biotechnology Genomatica, Inc. Chen, Joanna Densmore, Douglas M. Dmytriv, Zinovii Ham, Timothy S. Hillson, Nathan J. Rosengarten, Rafael D.	Time and cost-saving platform for automated combinatorial DNA assembly	Physical Biosciences

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TOUGH Software Birkholzer, Jens Cortis, Andrea Doetsch, Joseph Doughty, Christine Finsterle, Stefan Ghezzehei, Teamrat Haukwa, Charles Houseworth, James Ito, Kazumasa Johnson, Jeffrey Kim, Jihoon Kowalsky, Michael Liu, Hui-Hai Lu, Guoping Miller, Norman Moridis, George Mukhopadhyay, Sumit Murakami, Haruko Oldenburg, Curtis Pan, Lehua Pau, George Pruess, Karsten Reagan, Matthew Rutqvist, Jonny Seol, Yongkoo Shan, Chao Smith, Torqil Sonnenthal, Eric Spycher, Nicolas Steefel, Carl Webb, Stephen Wu, Yu-Shu Xu, Tianfu Zhang, Guoxiang Zhang, Keni Zhang, Yingqi Zheng, Liange Zhou, QuanLin	Suite of software codes for environmental remediation, energy production and other applications	Earth Sciences
Veeco Instruments Anders, Andre Macgill, Robert A.	Cathodic arc twist filter used in semiconductor / data storage manufacturing	Accelerator and Fusion Research* Engineering

Publishing Contracts

Author	Title	Division
Bailey, David H.	<i>Experimentation in Mathematics</i> <i>Mathematics by Experiment: Plausible Reasoning in the 21st Century</i>	Computational Research
Bethel, Edward W. Childs, Henry R.	<i>High Performance Visualization: Enabling Extreme Scale Scientific Insight</i>	Computational Research
Forest, Etienne	<i>Beam Dynamics: A New Attitude & Framework</i>	Advanced Light Source
Javandel, Iraj Doughty, Christine Tsang, Chin-Fu	<i>Groundwater Transport: Handbook of Mathematical Models,</i>	Earth Science
Kinoshita, Kim	<i>Electrochemical Oxygen Technology</i> <i>Carbon: Electrochemical and Physicochemical Properties,</i>	Environmental Energy
Rotem, Doron Shoshani, Arie	<i>Scientific Data Management: Challenges, Existing Technology, and Deployment</i>	Computational Research
Seaborg, Glenn Ghiorso, Albert Hoffman, Darleane C.	<i>The Transuranium People</i>	Nuclear Science
Seaborg, Glenn	<i>A Scientist Speaks Out</i> <i>Modern Alchemy: The Selected Papers of Glenn T Seaborg</i>	Nuclear Science
Tsang, Chin-Fu	"Analysis of Flow and Transport in Fractured Rocks" (a chapter in the book, <i>Flow and Contaminant Transport in Fractured Rocks</i>)	Earth Science