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Appendix: Product Development Efforts Led by Thomas H. Bishop

Echo Therapeutics, Inc.

Symphony Continuous Glucose Monitoring System (CGM)

- Non invasive Continuous Glucose Monitor, used for both diabetic and consumer applications.
- A motorized skin exfoliator (precisely exposes Interstitial Fluid by removing uppermost layer of skin), using embedded control system, sensitive electronics and Bluetooth Low Energy (BLE).
- Low cost, disposable non-invasive biosensor module, using glucose oxidase technology and customized hydrogel.
- Low cost, reusable Bluetooth transmitter with custom electronics and embedded software.
- Smart Phone App and documented API (Application Programming Interface) to display glucose data.
- ICU style patient monitor, with alarms, GUI and data storage capability.
- Click [here](#) to see Echo's website.

iWalk, Inc.

BiOM Robotic Prosthetic Ankle

- New embedded software with an improved walking algorithm and higher reliability.
- New battery and updated electronics to improve user experience.

TransMedics, Inc.

Organ Care System (OCS) – Lung

- The OCS-Lung maintains human lungs in a normal, breathing state outside the body. It includes an electro-mechanical console (5 PC boards, 4 CPUs, software, custom ventilator etc), a wireless monitor, a single-use perfusion module, two types of gas, and a priming solution.
- The OCS-Lung was the second product using a family-architecture, utilizing roughly 80% common components.
- URL to video: <http://www.youtube.com/watch?v=pzSIKje7Lg0>

Organ Care System (OCS) - Heart

- The OCS-Heart maintains human hearts in a normal, beating state outside the body. Most of its components are the same as described above, but some components are unique (gas, priming solution, and perfusion module).
- Led the system design for the OCS, and defined the way in which the four computers would cooperate to make the system work. I then managed the company-wide team that pushed through the commercial launch.
- URL to video: <http://www.youtube.com/watch?v=Fwd32Xa3uwc>

Quarry Technologies

IQOS (software for the iQ4000 Edge Router)

- The iQOS is a highly specialized operating system for the iQ4000 edge router, which provides security services on high performance hardware. iQOS supports protocols, including BGP, OSPF, IP Sec, NAT and others.
- URL to brochure: <https://www.dropbox.com/s/oqs4rtu16pefcqp/iQ8000.pdf>

Analogic

NPB 3900, NPB 4000 and NPB 4000C

- Developed product line of low-cost, non-invasive patient monitors, using a common software and hardware platform in order to reduce time to market, and to provide a common user experience.
- URL to brochure: <https://www.dropbox.com/s/80v5izxili2y38w/NBP-3900.pdf>
- URL to brochure: <https://www.dropbox.com/s/wmgmh3byppvldad/NBP-4000.pdf>

Siemens Medical Systems

Pick and Go Product Line

- Developed a common software architecture for a new generation of portable patient monitors.
- Co-invented the “pick and go” concept for portable, configurable patient monitors; then developed the first product to implement the concept.
- URL to brochure: <https://www.dropbox.com/s/r1jt9f5eujssr9n/Pick and Go.pdf>

SC 9000 (Hercules) Patient Monitor

- Managed all development (software, hardware and mechanical) until the product was in full production.
- Led a multi-disciplinary program team, with representatives from all company departments.
- URL to brochure: <https://www.dropbox.com/s/x9p8wqcwsuieqpb/SC9000.pdf>

S700 Family of Patient Monitors

- Pioneered a new way of developing software in the company, which resulted in industry-award-winning improvements to delivered product quality and customer satisfaction.
- URL to brochure: <https://www.dropbox.com/s/qccu3uy40uwsnfl/S730.pdf>