Exhibit A

Exhibit A1: Fundamental's Intrinsic and Extrinsic Evidence for the '111, '586, '766 and '550 Patents

Exhibit A2: Fundamental's Intrinsic and Extrinsic Evidence for the '319 and '514 Patents

Exhibit A3: Fundamental's Intrinsic and Extrinsic Evidence for the '655 Patent

Exhibit A4: Summary of Opinions by Dr. Kenneth Fernald

Exhibit A1: Fundamental's Intrinsic and Extrinsic Evidence for the '111, '586, '766 and '550 Patents

Patent/ Claim	Term[1]	Fundamental's Proposed Construction	Examples of Intrinsic Evidence[2]	Examples of Extrinsic Evidence
'111 patent, claims 1-17	**USB connector**	USB connector: a component that includes pins for Vbus and Gnd power, and D+ and D- communications and that connects to a USB device, hub, host or adapter	'936, 6:46-7:2 ("FIG. 2 is a schematic diagram of a first embodiment of an adapter 100 that can be used to couple the mobile device 10 of FIG. 1 to the data/power source 56 of FIG. 1. In this example, the adapter 100 is a USB adapter 100 that comprises a primary USB connector 102 . . . Also shown in FIG. 2 is an optional auxiliary USB connector 112 that can be used to couple the mobile device 10 to a data source (not shown) such as a personal computer. [¶] In the embodiment shown in FIG. 2, the primary USB connector 102 is configured to mate with the USB connector 54 of the mobile device 10. The USB adapter 100 is operable to provide power to the mobile device 10 through the Vbus and Gnd power pins in the USB connectors 54 and 102. The USB adapter 100 also optionally provides a communication for data across the D+ and D- data pins in the USB connectors 54 and 102"); Fig. 2 '936, 6:7-14 ("Coupled to the USB port 18 is a USB connector 54. The USB connector	USB 2.0, pp. 1, 14, 24, 85-92 (captive cables with one end terminated with a vendor-specific connector means); USB 2.0 ECN #1 (10/20/2000), *e.g.*, p.1 ("Reason for ECN: The USB 2.0 specified device-side connector – the B connector – is too large for use with a new generation of handheld and mobile devices, *e.g.,* cell phones which would benefit from connectivity to the PC. This ECN incorporates a specification of a device-side mini connector (hereafter referred to as a mini-B connector). The new connector only applies to upstream facing ports, i.e., connectors on devices."); *id*. ("Assessment of Impact on Current Specification and Current USB Products: The connector specified in the ECN will not have any impact on

[1] The phrases in square brackets provide context and require no construction.
[2] The '111, '586, '766, and '550 patents share a common specification, along with U.S. Patent No. 6,936,936. Thus, citations to the specifications of each patent are interchangeable.

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			54 is the physical component that couples the USB port to the outside world. In the exemplary mobile device 10, the USB connector 54 is used to transmit and receive data from an external data/power source 56, receive power from the external data/power source 56, direct the transmitted/received data from/to the USB port 18, and direct the received power to the power subsystem 20."); '936, 2:24-30 ("The primary USB connector is electrically coupled to the power converter and is operative to couple to the mobile device and to deliver the outputted power requirement to the mobile device. The identification subsystem is electrically coupled to the primary connector and is operative to provide an identification signal."); 2:40-45 ("The primary USB connector is electrically connected coupled to the power converter and is operative to couple to the mobile device and to deliver the outputted power requirement to the mobile device. The auxiliary USB connector has data lines that are electrically coupled to the data lines to the primary USB connector."); 2:46-60 ("Yet another aspect provides a method for providing energy to a	hardware or software of existing USB products. The current USB spec already allows for vendor-specific device side connectors – such cable assemblies are called captive assemblies. All that the ECN does is to identify one such connector for use in devices which need the smaller size of connector. There is a potential for some end-user confusion because of two standard cable options; but this can be mitigated by appropriate end-user education."); p. 98 (pin assignment, adding an ID pin in addition to D+, D-, Gnd and Vbus). "Universal Serial Bus on-the-Go for Portable Devices" (2/29/2000 Presentation) (contemplating new USB connector forms for USB OTG application); OTG Supplement 1.0 (Dec. 2001), p. 6, Section 3.8 (adding Mini-A plug, Min-A receptacle and mini-AB receptacle); pp. 9-32, Section 4 (supplemental mechanical requirements on the newly

Patent/ Claim	Term[1]	Fundamental's Proposed Construction	Examples of Intrinsic Evidence[2]	Examples of Extrinsic Evidence
			mobile device using a USB adapter that comprises a plug unit, a primary USB connector, a power converter electrically coupled between the plug unit and the primary USB connector, and an identification subsystem electrically coupled to the primary USB connector. The method comprising the steps of coupling the USB connector the mobile device, coupling the plug unit to a power socket, outputting a power requirement to the mobile device via the power converter and the USB connector, and providing an identification signal to the mobile device, via the identification subsystem and the USB connector, that is operative to inform the mobile device that the USB adapter is not limited by the power limits imposed by the USB specification."); see also, e.g., Abstract ("The primary connector is electrically coupled to the power converter and is operative to couple to the mobile device and to deliver the outputted power requirement to the mobile device. The identification subsystem is electrically coupled to the primary connector and is operative to provide an identification signal."); 2:9-14 (same); 2:15-19 ("In accordance with another aspect, a USB adapter for providing a source of power to a mobile device through a USB	introduced connector types, including new pins); USB Cables and Connectors Class Document v. 1.0 (1999), p.1, section 1.1 ("In addition, this document provides detailed requirements for the design, approval and implementation of application specific USB connectors and fabricated cable assemblies."); p.2 (ASUPS: "The acronym for Application Specific USB Product Specification. An ASUPS describes the unique characteristics of a special purpose nonstandard USB connector or cable assembly specification."); USB devices with proprietary USB ports and connectors, including Olympus C700 Ultrazoom (*see* user manual, images of CB-USB1 cable that came with the device, and image from Amazon.com site), Pentax Optio 330 Manual (*see* user manual and images); Sony Cybershot DSC-F505 (*see* user manual and images); Kodak

Patent/ Claim	Term[1]	Fundamental's Proposed Construction	Examples of Intrinsic Evidence[2]	Examples of Extrinsic Evidence
			port is provided. The USB adapter comprises a plug unit, a power converter, a primary USB connector, and an identification subsystem.") '936, 3:46-47 ("an industry standard interface 18 which in this example is a USB port"); '936, 3:54-57 ("The USB port 18 provides the mobile device 10 with a serial port for linking directly with other computers and/or a means for receiving power from an external power source."); '936, 5:56-6:14 ("The USB port 18 provides the mobile device 10 with a serial port for linking directly with other computers to exchange data and/or to receive power. The USB port 18 also provides the mobile device 10 with a means for receiving power from an external power source. . . . ."); '936, 7:31-33 ("The power converter 104 provides its energy output to the mobile device 10 via the Vbus and Gnd	Easyshare DX3215 (*see* user manual and images); Kodak Easyshare Z612 (*see* user manual, images and Kodak website information on devices that use USB Cable, Model U-8); *see also*, *e.g.*, manuals and images related to Handspring Treo90 and Nikon Coolpix. USB Micro-USB Cables and Connectors Specification (2007) at p. 6, section 1.1; USB 3.0 Specification, pp. 5-1, 5-2, 11-1, 11-2; section 5.2.1.; USB 3.1 Specification, pp. 5-1, 5-2, 11-1, 11-2; sections 5.3 & 5.4; USB Type-C Cables and Connectors Specification v.1.3, pp. 21-23, 60, 61, 66-67 section 3.4.2, Figure 3-23, Tables 3-5, 3-11; Dr. Fernald's testimony as summarized in Exhibit A4. [NB: The citations referenced are examples only. The entire document is relevant.]

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