## <u>Q1 – Subject Matter</u>

Claim 1 recites an electronic accessory device ("EAD"), which is a physical "machine" that would be difficult to challenge on subject matter eligibility grounds. In particular, claim 1 is not directed to any of the judicial exceptions; rather, it is a man-made machine that is not found in nature.

Claim 2, on the other hand, can be the subject of a reasonable subject matter eligibility challenge by HP. Specifically, HP can argue that claim 2 is directed to a method of controlling a device (the "EAD") with another device (portable computing device ("PCD"). This method can be considered an abstract idea, since it is merely a conventional activity well known to a PHOSITA in the field of computers, and the additional features recited in the claim (receiving, forming a communication channel, controlling an operation, etc.) are also "conventional" in the computer field, and thus do not add anything "significantly more" to the claim (Alice/Mayo/Bilski).

## Q2 – Validity

### A. Utility

A claimed invention must have three types of utility: operable, beneficial (arguably no longer required), and practical.

Here, the inventions claimed in both claims 1 and 2 have operable utility because a PHOSITA (in the field of computers/PCDs) would not find the inventions recited in claims 1 and 2 to be inherently unbelievable. Given the state of the art, namely, that both PCDs (iPhones and laptops) and laptop docks already exist, a PHOSITA would believe

that the claimed EAD, and the method of connecting/operating the EAD and PCD, would work at the time of filing.

Regarding beneficial utility, an argument could be made that the types of devices claimed in claims 1 and 2 are contributing to the decline of social and moral values, given that such devices erode the relationships within a family or with friends. Namely, such devices cause family members or friends to spend more time alone rather than with each other, such that relationships degrade and are stressed. However, the argument against beneficial utility likely will not succeed since computer devices and methods of connecting them are useful to society (they increase productivity and provide endless joy), and the CAFC has brought the beneficial utility requirement into question, especially given that even gambling methods and devices have beneficial utility according to the CAFC (more of a moral/social vice than the claimed invention here).

Regarding practical utility, the claimed inventions recited in claims 1 and 2 provide a well-defined, particular, and presently available benefit to the public, such that practical utility likely is met. In particular, the claimed device and method have a particular use (coupling with a PCD) to enable a person to extend the capabilities of their PCDs. These uses are not mere objects of use testing or further research, since these benefits are available right now. Accordingly, there is practical utility.

## B. Enablement – § 112, First Paragraph

The enablement requirement requires the patent applicant to describe the manner and process of making and using the claimed invention in such full, clear, concise, and

exact terms as to enable a PHOSITA to make and use the full scope of the claimed invention at time of filing without undue experimentation.

Here, both PCDs (iPhones and laptops) and laptop docks already exist. Moreover, since laptop docks already exist, the technology also already exists to couple a laptop with its dock. Therefore, it is not unreasonable to expect that it would be within the skill of a PHOSITA to be able to connect an EAD (functionally equivalent to a laptop dock) with a PCD without undue experimentation. Indeed, the specification even states that "[i]mplementation of such an accessory device, including different configurations, is well within the skills of one having skill in the art." While such a bare statement standing alone would not necessarily be sufficient to demonstrate enablement, the other evidence present (i.e., that laptops, laptop docks, and their connections already are known) lends credence to such a statement in the specification. Accordingly, claims 1 and 2 likely are enabled.

# C. Written Description – § 112, First Paragraph

The written description requirement asks whether the disclosure of the application reasonably conveys to a PHOSITA that the inventor had possession of the claimed subject matter as of the filing date.

Initially, it is noted that the claims recite "electronic accessory device" whereas the specification refers to this features as "accessory device" (without the word "electronic"). These terms appear to refer to the same feature, and a PHOSITA would believe that the inventor was in possession of an "electronic accessory device" as recited in the claims, since the "accessory device" in the specification necessarily is electronic in

nature. Accordingly, there does not appear to be a written description issue regarding this discrepancy.

Each of the elements in claim 1 is present in the specification, such that there likely is no written description issue with respect to claim 1. Specifically, the EAD is feature 100 in the drawings (and is described in words in the specification); the means for receiving input/output is shown in the figures as a keyboard and display screen (and described in the specification), and the specification describes the input/output aspect of the PCD; the housing and recess are at least shown in the figures; and the communications channel is described in the specification as connection mechanism arranged to facilitate communication between the EAD and PCD. While the "inoperable" feature is not disclosed explicitly in the specification (though presumably the claims originally contained this element), the specification does describe that the EAD "can have limited or no data processing resources (that is, no CPU), as it obtains those resources from the portable computing device," such that this disclosure reasonably would show to a PHOSITA that at the time of filing the inventor was in possession of an EAD that was inoperable without a PCD. Accordingly, claim 1 likely has no written description issues.

Claim 2 is more likely to have a written description issue, but ultimately there likely is no issue. In particular, claim 2 essentially recites a method of connecting the PCD and EAD and controlling the EAD with the PCD, where the physical features recited in claim 1 are also present in some form in claim 2 (and thus the physical features of claim 2 are supported in the specification). This claimed method (or any method) is

not explicitly disclosed in the specification; however, a PHOSITA would reasonably believe that the inventor was in possession of such a method at the time of filing. Specifically, the specification discloses how the invention is used to "expand a suite of functions" available to a PCD, and shows in the figures how a phone or a tablet would be positioned in an EAD. This description essentially is teaching a PHOSITA a method of how to connect the PCD and EAD, and the specification further discloses, in one embodiment, how a use can control the EAD using the touch screen of the PCD. Accordingly, the inventor was in possession of the method of claim 2, such that there is likely no written description issue with respect to claim 2 either.

## D. Definiteness – § 112, Second Paragraph

"A patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." (Nautilus).

## 1. Claim 1: "providing output (display) to the user"

It is unclear whether the "output" recited in claim 1 can be any type of output, or whether it is limited to the parenthetical "display." While the specification and figures show the output to be a "display," presumably other outputs could be encompassed by the claim (e.g., sound, vibration, etc.). However, the use of parenthesis in the claim fails to inform a PHOSITA with reasonable certainty whether claim 1 requires a display to be the output, or whether a display is one type of output. Accordingly, claim 1 is indefinite.

Pat Holder will argue that the parenthetical "display" is merely an option, but not a required feature of the claim (to keep the claim broader).

## 2. Claims 1 and 2: "inoperable"

Claims 1 and 2 require that the EAD is inoperable without the PCD and communication channel. However, the claim term "inoperable" is not defined in the specification, and the specification does little to clarify the meaning of this term. Specifically, the only relevant portion of the specification discloses that the EAD "can have limited or no data processing resources (that is, no CPU), as it obtains those resources from the portable computing device." In view of this description, it is unclear whether "inoperable" is related solely to whether data processing resources are present (i.e., is a CPU present), or if an EAD can meet the definition of "inoperable" while still having other features available (e.g., is an EAD with a flashlight feature but no CPU "inoperable"?). Because the answer to this type of question is unclear, and a PHOSITA would not know with reasonable certainty what the term "inoperable" means when read in light of the specification, both claims 1 and 2 fail the definiteness requirement.

Pat Holder will argue that the specification makes clear that the EAD is inoperable if the EAD has limited or no data processing resources. Likely, Pat Holder will only argue complete inoperability if needed (e.g., if this limited definition ensnares prior art).

### 3. Claim 2: "enhancing a portable computing device"

The term "enhancing" recited in claim 2 may be indefinite because this is a relative term without a basis from which to compare. In other words, it is unclear how a PCD in the claimed method is "enhanced" relative to a PCD that is not employed in the claimed method.

In response, Pat Holder would argue that the claims must be read in view of the specification, and the specification makes clear that the "invention is an accessory that can be used to expand a suite of functions and operational resources available to a portable computing device." Accordingly, the claimed method "enhances" a PCD by expanding its suite of functions and operational resources when connected to an EAD. Therefore, claim 2 is not indefinite.

## 4. Claim 1: "means for . . . "

Claim 1 recites a means plus function feature, namely, "means for receiving input from or providing output (display) to the user," which is only indefinite if the specification does not recite a specific structure for performing the claimed function. Here, since the specification discloses associated structures for performing this function (keyboard, touch screen, and display), so the means plus function feature is not indefinite.

# E. Novelty and Statutory Bars - §§ 102(a), (b), (c), (e), (f), and (g)

# 1. Critical Dates for Pat Holder

#### a. For Novelty Purposes

The critical date for novelty purposes is the invention date, which is the reduction to practice date. The facts show that while Pat did not actually reduce her invention to practice, she constructively did so by filing a patent application, such that her reduction to practice date is October 1, 2012. If a piece of prior art from "another" can predate this date of 10/1/2012 (and assuming such prior art is within a year prior to 10/1/2012 such that it is not a statutory bar), then Pat may be able to antedate the reference by showing earlier conception, followed by diligence, followed by reduction to practice (i.e., filing).

The facts show that Pat "started playing around" with her idea on 6/1/2011, and this idea included all of the limitations of what is eventually claimed in claims 1 and 2 (embedding an iPhone/iPad in a dock, all processing would be done on iPhone/iPad, input would be done by a keyboard or iPhone/iPad screen, output on the dock's screen, multipurpose iPhone/iPad screen, etc.). Therefore, 6/1/2011 is the conception date. Diligence is only relevant if another party conceived after Pat but reduced to practice first (which we will find out below as the discussion proceeds), but, in any event, Pat appears to be diligent here, because she "went home and worked on a design," and although not successful, she was "[n]ever one to give up" and filed a patent application on 10/1/2012. The facts show no lack of diligence.

### b. For Statutory Bar Purposes

The critical date for statutory bar purposes is October 1, 2011, i.e., one year prior to Pat's filing date.

### 2. Possible Prior Art and Anticipation Arguments

### a. iPhone, iPad, Laptop Dock, Phone, Tablet, Keyboard, etc.

All of the items shown in this subheading are clearly prior art to Pat's claimed invention because the facts indicate that Pat was playing around with many of these items, or at least knew about all of these items when she conceived of her invention. Accordingly, all of these items are in the prior art (at least 102(a) art, if not 102(b)). However, none of these items alone would anticipate the claims, since they do not have all elements.

### b. Pat Holder's Own Activities

Pat Holder did not have any activities under any of the 102 sections that would be prior art. Specifically, there is no indication Pat gave up control, made her invention public before filing, offered it for sale before filing, etc.

#### c. Wii U

**102(a)**: the Wii U is not prior art under 102(a) because it was not publicly known or used by others in this country, or patented or described in a printed publication worldwide by another prior to invention date (10/1/2012). Specifically, the activity of engineers in June 2010 apparently was not a public endeavor at the time, since there is no indication from the facts that it was. While the engineers' work included "testing it with user groups," this appears to fall under the experimental use exception, since the engineers were likely making "a *bona fide* effort to bring his invention to perfection or to ascertain whether it will answer the purpose intended." (Nicholson). There is no indication this testing was merely for marketing purposes, but instead it was "to create the product."

Moreover, Nintendo is a Japanese company, so to the extent any of the engineers' work or testing was done in Japan, such extra-US work would not qualify under 102(a) for prior use/knowledge purposes, which requires the work to be done "in this country."

Moreover, while the photos of the system released in September 2011 would qualify as a printed publication under 102(a), the photos apparently were not enabling, considering that "tech websites everywhere speculated how the new system might work." The publishers/users of the tech websites likely would be considered PHOSITAs, and if

they could only speculate, then the photos were not enabling. Since the actual system was no released until 11/2012, after Pat's invention date of 10/1/2012, the actual system is not prior art under 102(a).

Accordingly, none of the activities for the Wii U are prior art under 102(a).

<u>102(b)</u>: since none of the activities for the Wii U qualified as art under 102(a) (with a critical date of 10/1/2012), none of these activities would be able to meet the earlier critical date of 10/1/2011 for 102(b) purposes. There is also no evidence in the facts of an offer for sale of the Wii U in the US more than a year prior to Pat's filing date. Accordingly, the Wii U is not prior art under 102(b).

<u>102(g)(2)</u>: the Wii U may be prior art under 102(g)(2), since the Wii U is an invention that was not abandoned, suppressed, or concealed (it was commercialized). But it is not clear when Nintendo actually reduced the Wii U to practice. Conception likely was on or before June 2010 when the engineers were working on it, and reduction to practice could have been around September 2011 when pictures were circulated of the system online. If this is the case, then the Wii U is 102(g)(2) prior art (diligence is irrelevant since Nintendo would have reduced the Wii U to practice before Pat did for her invention). If the reduction to practice date for Wii U is sometime after Pat's filing date, then Wii U could still be 102(g) prior art if Nintendo can show diligence (and here the facts state the engineers "worked diligently").

<u>Validity Argument</u>: assuming the Wii U is prior art under one of these 102 sections, claim 1 would not be anticipated by the Wii U, since the Wii U is missing at least the housing with recess. Moreover, there is an argument whether the TV would be

"inoperable" without the handheld, considering the TV would still operate without it (e.g., play movies/TV shows). The other features likely are met, e.g., the "communications channel" presumably can be a Wi-Fi connection, and the "means" is the handheld. Claim 2 might not be anticipated, because the user might not "receive" the PCD at the EAD, since the PCD is always remote from the EAD (again, there is still an argument whether the TV is "inoperable").

# d. The Surface Tablet

<u>102(a)</u>: the surface tablet likely qualifies as 102(a) art, since it was publicly released on July 1, 2012, which is prior to Pat's filing date (RTP date) of 10/1/2012. However, Pat can antedate this art if Pat can show diligence from just prior to July 1, 2012 until her reduction to practice date of 10/1/2012. As discussed above in Section E.1.a., Pat may have a chance at showing this.

<u>102(b)</u>: the surface tablet is not 102(b) art because it was worked on in secret until it was released July 1, 2012 (such that no disclosures were made before the critical date of 10/1/2011).

<u>102(g)(2)</u>: the surface tablet may be 102(g) art; however, there are not sufficient facts to support this argument at this time (we know nothing of Microsoft's invention date here).

<u>Validity Argument:</u> assuming the Surface Tablet is prior art under one of these 102 sections, claim 1 may be anticipated. For example, the "means" in claim 1 is the keyboard, which provides "input" (no display required since the claim recites "or providing output"); the housing carrying the PCD and the housing having a recess in

claim 1 is potentially met by the groove and tabs that hold the tablet in place; the communications channel in claim 1 being the exposed connects on the keyboard that connect to the Surface Tablet; and the "inoperability" of the keyboard without the Tablet is met (since the keyboard will not function without a PCD). Claim 2 similarly is anticipated by the Surface Tablet, since all of the method steps are met (effectively: connecting the Tablet to the keyboard and typing would meet the method steps).

#### e. HP Lap Dock

<u>102(a), (b)</u>: there is no indication that the HP Lap Dock was publicly disclosed anywhere, or was in use or on sale in this country, prior to 10/1/2011 or 10/1/2012. Moreover, although the application contains claims, these claims do not confer "substantial rights" until they issue as a patent, such that the subject matter of the claims is not "patented" for 102(a) or (b) purposes. Accordingly, the Dock is not prior art under 102(a) or (b).

<u>102(e)</u>: the facts do not mention if this is a US or PCT filing (in English designating US); if it is, then the patent application would be 102(e) art, since it was filed 9/30/12, i.e., before Pat's filing date of 10/1/2012. If it is not such a US or PCT filing, then it would not be prior art under 102(e). If it is 102(e) art, Pat might be able to antedate the reference by showing conception, followed by diligence just prior to 9/30/12 up to Pat's filing date of 10/1/2012 (as discussed in Section E.1.a.) – easy considering it's just one day.

<u>Validity Arguments:</u> assuming the HP Lap Dock is prior art under one of these 102 sections, claim 1 is not anticipated. The "means" in claim 1 would be the keyboard

and trackpad (the structure in the specification); the communications channel is the wire that connects the WMP to the Dock, and the communications channel likely is *configured to* receive a control signal from the PCD (since the PCD does not "control" the Dock) – arguably, the wire (e.g., USB cable) is configured to send a control signal, since most/all phone cables do this, it's just that this configuration is not *actually sending* a control signal (but actually sending is not required by claim 1); and the Dock is inoperable without the phone (the presence of the graphics card does not change this conclusion). However, the there is no "recess" in the housing of the Dock (only a pocket). Claim 2 also is not anticipated, because the Dock is not controlled using the WMP.

## 3. Obviousness

Obviousness is assessed under the Graham factors. The scope and content of the prior art is described above in Section 2, and here I assume all of the art is available, since we cannot disqualify it completely, e.g., at least under §§ 102(e) and (g). The level of ordinary skill is a person having several years experience in using computers and PCDs, and knowing ways to connect them. Here I describe the differences between the art, and whether the claims are obvious.

The best obviousness argument for both claims 1 and 2 starts from the HP Lap Dock. This product meets all features of both claims, except for controlling the Dock with the connected phone. The Wii U, on the other hand, shows using a handheld portable computer device to remotely control a TV. It would have been obvious to a PHOSITA at the time of the invention to use the phone of the Dock to control the Dock in a similar manner to how the Wii U controls the TV remotely, rather than only being

able to do so through the Dock itself. The PHOSITA would have been motivated to do so because it would desirable to be able to control the Dock through the phone, for example, if the PHOSITA is lying in bed and wants to control the Dock from farther away while watching a movie (for example, the cord on the phone would allow the phone to be in bed with the PHOSITA with the Dock on a table a few feet away).

If the HP Lap Dock is not available as prior art, another obviousness argument (for claim 1) starts from the Wii U, which has all features of claim 1, except the housing/recess feature, as discussed above in Section E.2.c. It would have been obvious to a PHOSITA to have included a recess in the TV's housing in order to store the handheld when not in use and so the handheld does not get lost.

## Q3 – Direct Infringement

Only claim 1 is relevant here, since claim 2 would be infringed by users, not by HP, and Pat would not be suing the users in this litigation.

Claim 1 is infringed to the same extent it is anticipated, as discussed in Section E.2.e, since that which anticipates if earlier, infringes if later. Section E.2.e shows that every element of the HP Dock is literally present in claim 1, except for the recess. The issue is whether the pocket on the HP device is equivalent to the claimed recess. Pat will argue a pocket is insubstantially different from a recess, since the purpose of both is to hold the PCD, such that the pocket is equivalent to the recess (and HP would infringe under the doctrine of equivalents ("DOE")). The pocket also performs substantially the same function, in substantially the same way, to achieve substantially the same result as the recess, because HP's pocket holds the PCD (function), by gripping onto the PCD (way), such that the PCD and EAD are attached (result). Claim 1 therefore is infringed under DOE. HP will argue the pocket is not equivalent to the recess because a pocket was foreseeable at the time of filing.

## Q4 – Indirect Infringement

### A. Contributory

As discussed in Q3, HP would likely be infringing claim 1. After purchasing HP's Dock, users would also be infringing claim 1, since the sale was not authorized by Pat. Contributory infringement requires knowledge of the patent, and no facts support this knowledge; but if HP did know of the patent, then HP could be liable for contributory infringement, since HP is selling a material part of Pat's invention (claim 1), HP knew of the activity of their customers/users, and there is no substantial non-infringing use of the Dock (it must be hooked up to a phone to be operable).

To be contributorily liable for infringing claim 2, there still must be a direct infringer. Here, the users are not controlling the Dock with the phone, such that claim 2 is not infringed, and thus no contributory infringement.

### B. Inducement

Induced infringement requires intent (knowledge of the patent and that the acts infringe) and providing instructions or otherwise aiding. There is no indication here (1) that HP knew of Pat's patent or that the HP Dock infringed, nor (2) that HP was providing instructions to its customers/users. As such, an inducement claim on these facts is likely to fail. Moreover, any inducement claim for claim 2 will fail because there are no direct infringers (Part A).