

## **SPE Review of Examiner's Work Product Workshop**

Take 10 minutes to review each example in Part A using the previously provided claim, specification, and prior art references, and answer the questions for that example before moving on to the next example and question set.

After completing part A, please take notes on the discussion pertaining to the final set of questions and be prepared to report out the answers.

### **Part A**

#### **Example #1 103 Rejection of Claim 1:**

**References used:** Davis (U.S. Patent 6,292,674), Naboulsi (U.S. PGPub 2004/0209594), and Kim (U.S. Patent 4,503,416)

Davis teaches a wireless telephone including a housing and a sensor on the surface of the housing, responsive to user macro-manipulation, to provide a sensor output (see Column 1 and Column 5). When the user grasps the housing, the conductive nature of the human hand causes a current to flow between plates of a switch. This completes a circuit, which is detected by the switch detector (See Col. 5).

However, Davis fails to teach the claimed sensor comprising carbon fiber strips disposed on the housing.

Naboulsi teaches a pair of sensors mounted on a steering wheel, which sensors are capable of sensing a physiological condition of the driver. Naboulsi gives several examples of types of sensors that convert pressure to an electrical signal, one being a carbon-type transducer (Para. [0044]).

Therefore, it would have been obvious at the time the invention was made to replace the capacitive sensor taught by Davis with a carbon-type sensor as taught by Naboulsi because they are both sensors and it would not matter which sensor was used.

However, Davis in view of Naboulsi fails to disclose that the carbon-type sensor is made of carbon fiber. Kim teaches that carbon fiber sensors are old and well known.

Therefore, it would have been obvious at the time the invention was made to replace the carbon-type sensor taught by Davis in view of Naboulsi with a carbon fiber sensor as taught by Kim since doing this would be common sense.

**Questions:**

1) Is each limitation set forth in claim 1 addressed?

2) Is the one to one correlation of the prior art teachings to the claimed limitations clear?

3) Is the rationale statement clear/proper?

## **Example #2 103 Rejection of Claim 1:**

**References used:** Davis (U.S. Patent 6,292,674), Naboulsi (U.S. PGPub 2004/0209594), and Kim (U.S. Patent 4,503,416)

Davis teaches a wireless telephone including a housing 302, and a sensor 304 on the surface of the housing, responsive to user macro-manipulation to provide a sensor output (Col. 1, lines 49-51; col. 5, lines 52-63). When the user grasps the housing 302, the conductive nature of the human hand causes a current to flow between first plate 306 and second plate 308 of the capacitance switch 304. This completes a circuit wherein Davis teaches that the wireless phone may be controlled to initiate a communication responsive to receipt of the signal from the switch detector (also in Col. 2).

However, Davis fails to teach the claimed sensor comprising carbon fiber strips disposed on the housing.

Naboulsi teaches a pair of sensors S1, S2 mounted on a steering wheel, which sensors are capable of sensing a physiological condition of the driver, including electrical skin conductivity of the driver's hand while gripping the steering wheel. Naboulsi gives several examples of types of sensors that convert pressure to an electrical signal, one being a carbon-type transducer (Para. [0044]).

Therefore, it would have been obvious at the time the invention was made to replace the capacitive sensor taught by Davis with a carbon-type sensor as taught by Naboulsi. One of ordinary skill in the art at the time the invention was made would have found it obvious to replace the capacitive sensor of Davis with the carbon-type sensor of Naboulsi since doing this would amount to a simple substitution of one known element (capacitive sensor) for another (carbon-type sensor) in order to obtain predictable results.

However, Davis in view of Naboulsi fails to disclose that the carbon-type sensor is made of carbon fiber. Kim teaches a tactile sensor composed of a carbon fiber layer 10 and two conductive layers 11 on opposite sides of the carbon fiber layer 10. Pressure applied to the sensor reduces the electrical resistances measured across the carbon fiber layer (col. 2, line 66 to col. 3, line 4).

Therefore, it would have been obvious at the time the invention was made to replace the carbon-type sensor taught by Davis in view of Naboulsi with a carbon fiber sensor as taught by Kim. One of ordinary skill in the art at the time the invention was made would have found it obvious to replace the carbon-type sensor of Davis in view of Naboulsi with a carbon fiber sensor of

Kim since doing this would amount to a simple substitution of one known element (carbon-type sensor) for another (carbon fiber sensor) in order to obtain predictable results.

**Questions:**

1) Is each limitation addressed?

2) Is the one to one correlation of the prior art teachings to the claimed limitations clear?

3) Is the rationale statement clear/proper?

### **Example #3 103 Rejection of Claim 1:**

**References used:** Davis (U.S. Patent 6,292,674), Naboulsi (U.S. PGPub 2004/0209594), and Kim (U.S. Patent 4,503,416)

Davis teaches a wireless telephone including a housing 302, and a sensor 304 on the surface of the housing, responsive to user macro-manipulation (squeezing), to provide a sensor output (Col. 1, lines 49-51; col. 5, lines 52-63). When the user grasps the housing 302, the conductive nature of the human hand causes a current to flow between first plate 306 and second plate 308 of the capacitance switch 304. This completes a circuit, which is detected by the switch detector 346. In response, the switch detector sends a signal to the controller 22 (Col. 5, lines 57-62). Davis teaches that the wireless phone may be controlled to initiate a communication ("send"), end a communication ("standby" or "on hook"), or redial a call responsive to receipt of the signal from the switch detector (Col. 2, lines 45-56).

However, Davis fails to teach the claimed sensor comprising carbon fiber strips disposed on the housing.

Naboulsi teaches a vehicle safety system including a pair of sensors S1, S2 mounted on a steering wheel, which sensors are capable of sensing a physiological condition of the driver, including electrical skin conductivity of the driver's hand while gripping the steering wheel. Naboulsi gives several examples of types of sensors that convert pressure to an electrical signal, one being a carbon-type transducer (Para. [0044]). Naboulsi teaches a system in which the driver must place both hands on the steering wheel, sensed by sensors S1 and S2, before the system will enable use of a wireless telephone (Para. [0045]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the capacitive sensor taught by Davis with a carbon-type sensor as taught by Naboulsi. because this would amount to a simple substitution of one known element (capacitive sensor) performing the same function of sensing tactile input for another (carbon-type sensor) performing the same function of sensing tactile input and the results of the substitution would have been predictable .

However, Davis in view of Naboulsi fails to disclose that the carbon-type sensor is made of carbon fiber. Kim teaches a tactile sensor composed of a carbon fiber layer 10 and two conductive layers 11 on opposite sides of the carbon fiber layer 10. Pressure applied to the sensor reduces the electrical resistances measured across the carbon fiber layer (col. 2, line 66 to col. 3, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the carbon-type sensor in the device of Davis as modified by Naboulsi with a carbon fiber sensor as taught by Kim because this would amount to a simple substitution of one known element (carbon-type sensor) performing the same function of sensing tactile input for another (carbon fiber sensor) performing the same function of sensing tactile input and the results of the substitution would have been predictable .

As a further rationale, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a carbon fiber sensor as the carbon-type sensor in the wireless telephone of Davis as modified by Naboulsi because carbon fiber has known advantages such as strength and lightweight, both of which would be relevant for use in mobile phones where lightweight and break resistance are important factors to consider.

**Questions:**

1) Is each limitation addressed?

2) Is the one to one correlation of the prior art teachings to the claimed limitations clear?

3) Is the rationale statement clear/proper?

After completing part A, please take notes on the discussion pertaining to the set of questions in part B and be prepared to report out the answers.

### **Part B**

1) How do you think the office actions compare to each other?

2) As a Supervisory Patent Examiner, what feedback would you have for the examiner who wrote each of the three office actions? Would you return any of the actions for improvement and if so, what type of coaching/mentoring would you provide to the examiner?

3) What have you learned through this exercise about how office actions are reviewed? How has your perspective changed?