

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GENERAL MOTORS LLC

Petitioner

v.

EDWARD H. NORTRUP

Patent Owner

Case IPR2023-00994

Patent 10,444,028

Petitioner's Argument Fails

The Knockart-Feldman combination fails to disclose all of the claim elements

- No disclosure of cellphone self-reporting location data (P. section 4.2, PO Sur R p. 7)
- And thus, no ability to enable/disable access to location data (P. section 1.5, PO Sur R p. 17)

'028 Claims 1 and 2

Claim 1 (P. section 4.1.5) wherein each of the plurality of cell phones further has a user initiated permission set comprised of a list of authorizations that permit a user to selectively enable or disable access to user cellphone location data.

Claim 2 (P. section 4.2) The computer program product of claim 1, wherein each of the plurality of cell phones communicates its respective locations through a cellular network infrastructure to a server for calculation of the traffic condition.

Petitioner's Argument is Fatally Flawed

- Petitioner made Feldman's data collection techniques a cornerstone of its argument

In either case, **the resulting system would have used Feldman's techniques for collecting traffic information using vehicle-carried cellular phones** to populate Knockeart's traffic database used to determine fastest routes between starting points and destinations. (emphasis added, P p. 10)

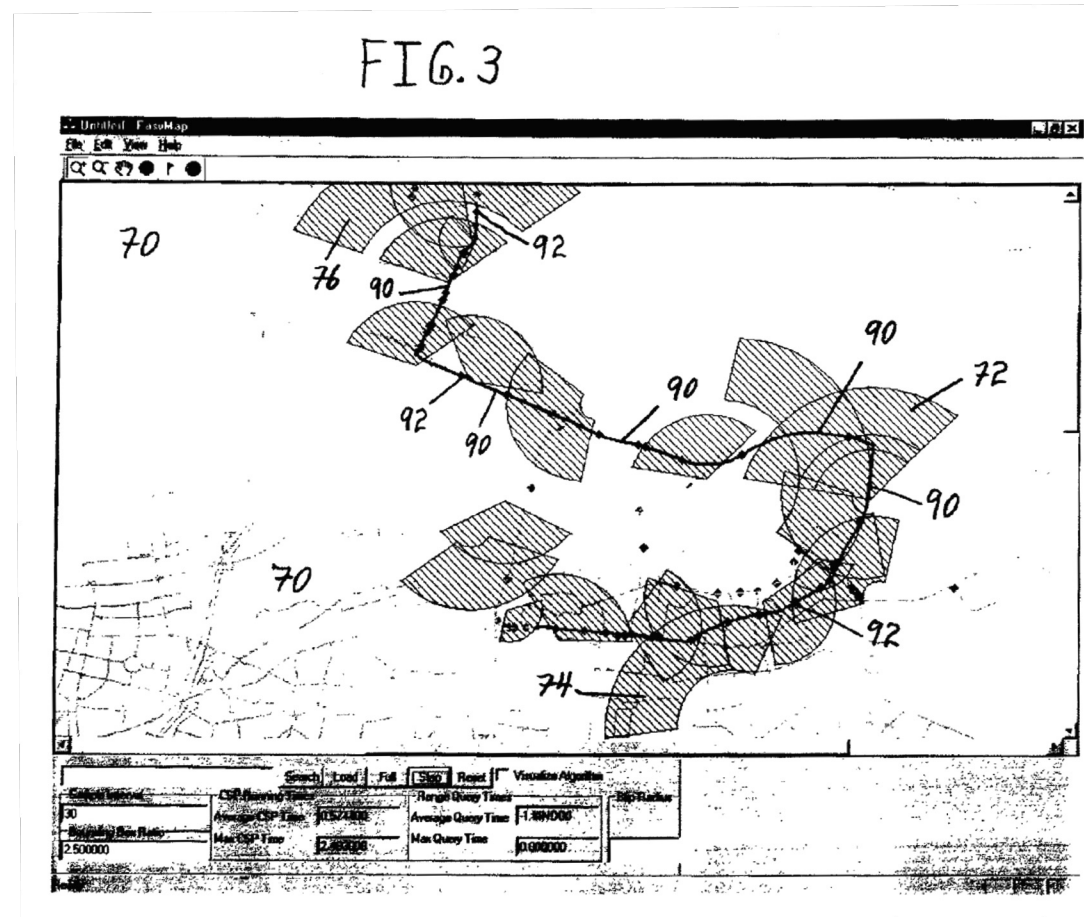
- However, Feldman does not support Petitioner's argument
 - Feldman does not disclose self-reporting cell phones (POR p. 8)
 - Feldman does not disclose a cellphone controlling location data (POR p. 4)

Feldman's Location Data Collecting Technique

Cellular phones suspected as being vehicle-carried are immediately tracked for their locations using the handovers themselves as footprints (Feldman [0061])

Sectors 72, 74 and 76 represent footprints from a cellular phone mobile communication network (Feldman [0077])

A normalized travel time path 90 is calculated based on the footprints (Feldman [007])



Feldman Fig. 3

Feldman – Petitioner’s Expert Confirms PO’s Position

Dr. Braasch Deposition on Feb. 1, 2024 (Exhibit 2001) confirmed the following:

1. Feldman does not disclose cell phones that self-report their locations (p. 37, ln. 23 - p. 38, ln. 5)
2. Feldman’s Network Collection system cannot be controlled by its cell phones (p. 32, lns. 8-20)
3. Feldman’s description of “global positioning system (GPS) **and/or** other types of mobile wireless communication” is meant to contrast the two separate technologies (emphasis added, pg 42 ln 21 – 43 ln 15)

Petitioner Attempts to Change Its Original Argument and “Reorient the Board” (PR p. 2)

1. Inappropriately reframes argument to reduce reliance on Feldman (PO Sur R p. 7)
2. Mischaracterizes Feldman as teaching cellphones self-reporting location data (PO Sur R p. 8, 10)
3. Inappropriately relies on new prior art in an attempt to fill the void Feldman leaves (PO Sur R p. 9)

Reframing Argument

- Introduces notion of “primary” and “secondary” configurations of the Knockart-Feldman combination in Reply, minimizing the importance of Feldman in the primary configuration. (PO Sur R. p. 3)
- Subordinates importance of Feldman by no longer relying on Feldman as disclosing cell phone self-reporting location data. (PO Sur R. p. 6)
- But Petition states unequivocally: “[i]n either case, ***“the resulting system of the Knockart-Feldman combination “would have used Feldman’s techniques for collecting traffic information.”*** (emphasis added P. 10)

Mischaracterizing Feldman

Petitioner mischaracterizes Feldman by conflating GPS and Cellular Network types of tracking technologies.

Petitioner's Reply summarizing Feldman [0008]:

“[S]uch prior art techniques make use of well known global positioning system (GPS)” implemented in “mobile wireless devices such as cellular telephones.” PR. 12 (emphasis added).

But Feldman states otherwise [008] (numbering and emphasis added):

For obtaining dynamic vehicle location and velocity data and information ... from **[1] uniquely or specifically dedicated in-vehicle mobile sensors or electronic devices, such prior art techniques make use of well known global positioning system (GPS) and/or [2] other types of mobile wireless communication or electronic vehicular tracking technologies,** such as cellular telephone or radio types of mobile wireless communications networks or systems, involving the use of corresponding **mobile wireless devices such as cellular telephones** ...

Introducing New Art

Petitioner attempts to cure the defect in its Ground 1 argument by relying on art (Simske & Whitshell) that was cited in its Ground 2 argument (PR p. 12-13)

Petition Cannot Now Argue That Self Reporting of Location Data Is Obvious

No Graham Analysis in Petition identifying the lack of Feldman's cellphone's ability to collect and transmit location data and then claiming that this ability would be obvious in light of some other reference. POR p. 12

Petitioner is precluded from making such argument now. Id.

Conclusion

Claim 1 “... each of the plurality of cell phones further has a user initiated permission set comprised of a list of authorizations that permit a user to selectively enable or disable access to user cellphone location data.”

Claim 2 “... wherein each of the plurality of cell phones communicates its respective locations through a cellular network infrastructure ...”

Because of the fatal error in Petitioner’s Ground 1 argument, Petitioner fails to identify these elements in the prior art, and, therefore, Petitioner fails to carry its of proving that the Challenged Claims are obvious over the Knockeart-Feldman combination.

Exhibit A – Dr. Brassch Deposition Testimony (Exhibit 2001)

Feldman does not disclose cell phones that self-report their locations (p. 37, ln. 23 - p. 38, ln. 5)

Q. And earlier you mentioned that you believe that the cell phones being discussed in Feldman did have some GPS capability.· Can you point me to the portion of Feldman that describes a cell phone reporting its GPS position to the cellular network?

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A. At the moment I'm not finding a particular disclosure that specifically recites what you're talking about.· But I would certainly point at paragraph 8 that talks about -- that talks about the -- the use of GPS in wireless communication systems and then the communication between the user and the servers.· I would also point out that the use of -- of GPS in -- in mobile phones was certainly known in the art at this time.

Exhibit A – Dr. Brassch Deposition Testimony (Exhibit 2001) - continued

Feldman's Network Collection system cannot be controlled by its cell phones (p. 32, Ins. 8-20)

Q. And with respect to some of these messages described in paragraph 60 -- and I'm looking at -- let's see. Cell handover, I believe there's mention of control messages. Would the -- the operator, whoever possesses the phone, the owner of phone, can they control the phone sending and receiving of control messages to and from the cellular network?

A. Only insofar as they could stop it by turning the phone off. But in terms of the actual protocol of the way the phone is interacting with the base stations, I don't believe -- off the top of my head here, I don't believe the user has -- has control over those control messages.

Exhibit A – Dr. Brassch Deposition Testimony (Exhibit 2001) - continued

Feldman's description of "global positioning system (GPS) **and/or** other types of mobile wireless communication" is meant to contrast the two separate technologies (emphasis added, pg 42 ln 21 – 43 ln 15)

Q. · Let me direct your attention, then, Dr. Braasch, to -- to the last sentence of paragraph 9 on that same page as paragraph 15. · And I'll just read it for the record. · It says, "For example, currently, there is a significantly larger potential number of vehicles associated with cellular telephone types of mobile wireless communication network or system compared to the potential number of vehicles associated with GPS types of a mobile wireless communication network or system." What do you take that sentence to mean and what is this "GPS types of a mobile wireless communication network or system" as distinguished from the "cellular telephone types," as discussed in that last sentence of paragraph 9?

A. · Thank you for the clarification. · I appreciate that. · And my -- my understanding I think -- understanding a person of ordinary skill would understand that -- what is being disclosed here is a -- is a contrasting of the -- of the -- of the cell phone network versus the use -- versus GPS functionality in the -- in the vehicle.