

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

ARRIVALSTAR S.A. and
MELVINO TECHNOLOGIES LIMITED,

Plaintiffs,

v.

CENTRAL PUGET SOUND REGIONAL
TRANSIT AUTHORITY d/b/a Sound Transit,

Defendant.

Civil Action No. 2:12-cv-977-TSZ

**SOUND TRANSIT’S NON-
INFRINGEMENT CONTENTIONS
AND INVALIDITY CONTENTIONS**

Defendant Central Puget Sound Regional Transit Authority (“Defendant” or “Sound Transit”), by and through its undersigned counsel, hereby discloses its patent non-infringement contentions and patent invalidity contentions to Plaintiffs ArrivalStar S.A. (“ArrivalStar) and Melvino Technologies Limited (“Melvino”).

Sound Transit’s position is based on the intrinsic evidence currently available to it without the benefit of the extrinsic evidence to be developed through discovery, Plaintiffs’ claim construction contentions, or the Court’s *Markman* order. Sound Transit reserves the right to revise its patent non-infringement and invalidity positions and to amend and supplement these disclosures to the extent further information becomes available through discovery or in light of Court rulings relevant to the issues herein.

UNITED STATES PATENT NO. 7,030,781
NON-INFRINGEMENT CLAIM CHART

United States Patent No. 7,030,781 ("the '781 patent")	<u>ABSENT ELEMENT</u>
Claim 1. A method, comprising the steps of:	Sound Transit does not use any method claimed in the '781 patent or described in the patent specification.
monitoring travel data associated with the vehicle;	Sound Transit does not monitor travel data associated with a vehicle using a vehicle control unit or base station control unit incorporating a base station control mechanism or a base station communication mechanism. Nor does any Sound Transit method utilize dual control units to monitor vehicle location and elapsed time.
comparing planned timing of the vehicle along a route to updated vehicle status information;	Sound Transit does not compare the planned timing of a vehicle along a route to updated vehicle status information using a vehicle control unit or microprocessor controller. Nor does any Sound Transit method compare the planned timing of a vehicle along a route to update vehicle status information using a base station control unit in communication with a user communications device. Nor does any Sound Transit method utilize dual vehicle and base control units to compare vehicle location and elapsed time.
contacting a user communications device before the vehicle reaches a vehicle stop along the route; and	Sound Transit does not contact user communications devices before a vehicle reaches a vehicle stop along the route via a base computer that automatically initiates communications to users.
informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.	Sound Transit does not inform users of vehicle delay with respect to a vehicle stop and of updated impending arrival of the vehicle at the vehicle stop based upon automatically updated vehicle status information and planned timing information.

UNITED STATES PATENT NO. 7,030,781
35 U.S.C. § 101 (UNPATENTABLE SUBJECT MATTER)
INVALIDITY CLAIM CHART

<p style="text-align: center;">United States Patent No. 7,030,781 (“the ‘781 patent”)</p>	<p style="text-align: center;">INVALIDITY (35 U.S.C. § 101)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Claim 1 of the ‘781 patent, as asserted against Sound Transit, does not constitute patentable subject matter. The invention asserted against Sound Transit is an unpatentable abstract idea that may be merely implemented by human beings using computers or user communications devices. The ‘781 patent’s applying and limiting of the abstract idea of monitoring, comparing, and communicating with users regarding vehicle schedules, routes, and updated travel data to specific steps in a particular technological environment or adding post-solution components does not render the concept constitutionally patentable subject matter under Art. I, § 8, cl. 8; 35 U.S.C. § 101; <i>Graham v. John Deere Co.</i>, 383 U.S. 1, 5, 86 S. Ct. 684 (1966); or <i>Bilski v. Kappos</i>, 561 US —, 130 S. Ct. 3218 (2010).</p>
<p>monitoring travel data associated with the vehicle;</p>	<p>Claim 1 of the ‘781 patent, as asserted against Sound Transit, does not constitute patentable subject matter. The invention asserted against Sound Transit is an unpatentable abstract idea that may be merely implemented by human beings using computers or user communications devices. The ‘781 patent’s applying and limiting of the abstract idea of monitoring travel data to specific steps in a particular technological environment or adding post-solution components does not render the concept constitutionally patentable subject matter under Art. I, § 8, cl. 8; 35 U.S.C. § 101; <i>Graham v. John Deere Co.</i>, 383 U.S. 1, 5, 86 S. Ct. 684 (1966); or <i>Bilski v. Kappos</i>, 561 US —, 130 S. Ct. 3218 (2010).</p>

1 comparing planned timing of the vehicle
2 along a route to updated vehicle status
3 information;

Claim 1 of the '781 patent, as asserted against Sound Transit, does not constitute patentable subject matter. The invention asserted against Sound Transit is an unpatentable abstract idea that may be merely implemented by human beings using computers or user communications devices. The '781 patent's applying and limiting of the abstract idea of comparing planned timing of a vehicle along a route to updated vehicle status information to specific steps in a particular technological environment or adding post-solution components does not render the concept constitutionally patentable subject matter under Art. I, § 8, cl. 8; 35 U.S.C. § 101; *Graham v. John Deere Co.*, 383 U.S. 1, 5, 86 S. Ct. 684 (1966); or *Bilski v. Kappos*, 561 US — , 130 S. Ct. 3218 (2010).

6 contacting a user communications device
7 before the vehicle reaches a vehicle stop
8 along the route; and

Claim 1 of the '781 patent, as asserted against Sound Transit, does not constitute patentable subject matter. The invention asserted against Sound Transit is an unpatentable abstract idea that may be merely implemented by human beings using computers or user communications devices. The '781 patent's applying and limiting of the abstract idea of contacting a user communications device before a vehicle reaches a vehicle stop along a route to specific steps in a particular technological environment or adding post-solution components does not render the concept constitutionally patentable subject matter under Art. I, § 8, cl. 8; 35 U.S.C. § 101; *Graham v. John Deere Co.*, 383 U.S. 1, 5, 86 S. Ct. 684 (1966); or *Bilski v. Kappos*, 561 US — , 130 S. Ct. 3218 (2010).

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informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.

Claim 1 of the '781 patent, as asserted against Sound Transit, does not constitute patentable subject matter. The invention asserted against Sound Transit is an unpatentable abstract idea that may be merely implemented by human beings using computers or user communications devices. The '781 patent's applying and limiting of the abstract idea of informing a user of a vehicle delay with respect to a vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing to specific steps in a particular technological environment or adding post-solution components does not render the concept constitutionally patentable subject matter under Art. I, § 8, cl. 8; 35 U.S.C. § 101; *Graham v. John Deere Co.*, 383 U.S. 1, 5, 86 S. Ct. 684 (1966); or *Bilski v. Kappos*, 561 US — , 130 S. Ct. 3218 (2010).

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 102 (ANTICIPATION)

INVALIDITY CLAIM CHART

Gilles David, “THE FRENCH EXPERIENCE WITH AUTOMATIC VEHICLE LOCATION IN URBAN TRANSPORTATION SYSTEMS” (Report Presented at the International Conference on Automatic Vehicle Location System, Ottawa, Canada, September 19-21, 1988)

NOTE: This claim chart is based on the copy of the David reference currently available as produced together herewith. The David reference is in the public domain, and Sound Transit reserves the right to update and supplement this disclosure and document production to the extent Sound Transit locates, through discovery or otherwise, a better or more complete copy of the David reference.

United States Patent No. 7,030,781 (“the ‘781 patent’”)	Gilles David, “The French Experience with Automatic Vehicle Location in Urban Transportation Systems” (Report Presented at the International Conference on Automatic Vehicle Location System, Ottawa, Canada, September 19-21, 1988)
Claim 1. A method, comprising the steps of:	David describes a method for monitoring, comparing, and communicating with users regarding travel data.
monitoring travel data associated with the vehicle;	David describes methods for monitoring travel data associated with a vehicle and transmitting that data to a central location, including at least using odometer readings together with door opening indicators and a system map, signpost locators, signpost locators and odometer readings, and radio transmitters onboard the vehicle picked up by signpost or fixed location detectors. <i>See David at 5, 6, 7, 10, 11, 12, 13, 14, 15, 16.</i>
comparing planned timing of the vehicle along a route to updated vehicle status information;	David describes a method for comparing planned timing of a vehicle along a route to updated vehicle status information by comparing the vehicle’s actual speed and position with the planned vehicle route and schedule and determining whether the vehicle is on, ahead of, or behind schedule. David discloses performing this calculation either onboard the vehicle or at a central location. <i>See David at 6, 8, 10, 11, 12, 13, 15, 16.</i>

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<p>contacting a user communications device before the vehicle reaches a vehicle stop along the route; and</p>	<p>David describes a method for contacting a user communications device before a vehicle reaches a vehicle stop along the route, including at least video radio, telephone or Minitel system telematics, and including while a user is at home or at a bus stop.</p> <p><i>See David at 4, 8, 13.</i></p>
<p>informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.</p>	<p>David describes a method for informing a user of the vehicle delay with respect to a vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing:</p> <p><i>See David at 4, 8, 13.</i></p>

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 102 (ANTICIPATION)

INVALIDITY CLAIM CHART

Labell, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART UPDATE ’92” (U.S. DOT April 1992)

<p>United States Patent No. 7,030,781 (“the ‘781 patent”)</p>	<p>Labell, et al., Advanced Public Transportation Systems: The State of the Art <i>Update</i> ’92 (U.S. DOT April 1992)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Labell describes a method for monitoring, comparing, and communicating with users regarding travel data.</p>
<p>monitoring travel data associated with the vehicle;</p>	<p>Labell describes methods for monitoring travel data associated with a vehicle:</p> <p>Labell describes measuring the position of a vehicle through methods including Global Position System (GPS), LORAN-C, radio-transmitter signposts (including odometer-assisted signpost systems), dead reckoning (including signpost-assisted dead reckoning), inductive loop detectors, and combinations of these and similar approaches.</p> <p>Labell describes monitoring travel data by transmitting location information (or processed data or exception reports) from the vehicle or remote device to a central computer system at regular intervals.</p> <p><i>See</i> Labell at xiii-xiv, 44-55.</p>
<p>comparing planned timing of the vehicle along a route to updated vehicle status information;</p>	<p>Labell describes a method for comparing planned timing of a vehicle along a route to updated vehicle status information:</p> <p>Labell describes comparing the vehicle’s actual speed and position with the planned vehicle route and schedule.</p> <p>Labell also discloses using this information to determine whether the vehicle is on, ahead of, or behind schedule.</p> <p><i>See</i> Labell at xii-xiv, 5, 31, 44-47, 51-52, 53, 54, 55, 56-57, 72-77.</p>

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contacting a user communications device before the vehicle reaches a vehicle stop along the route; and

Labell describes a method for contacting a user communications device before a vehicle reaches a vehicle stop along the route:

Labell describes contacting user communications devices, including via telephone, cable television, teletext, audiotex, videotex, cellular telephone, voicemail, in-vehicle displays and communication devices, electronic kiosks, and through personal computers.

Labell also describes contacting the user communications device prior to the vehicle's arrival at a stop along the vehicle's route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 52, 54, 56, 72-77.

informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.

Labell describes a method for informing a user of the vehicle delay with respect to a vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing:

Labell includes a description of informing the user of vehicle delays from schedule.

Labell includes a description of informing the user of updated estimates of vehicle arrival times based on vehicle location and status information and the planned vehicle route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 43, 44, 52, 54, 56, 72-77.

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 102 (ANTICIPATION)

INVALIDITY CLAIM CHART

Davies, et al., “ASSESSMENT OF ADVANCED TECHNOLOGIES FOR TRANSIT AND RIDESHARE APPLICATIONS” (NCTRP July 1991)

<p>United States Patent No. 7,030,781 (“the ‘781 patent”)</p>	<p>Davies, et al., Assessment of Advanced Technologies For Transit and Rideshare Applications (National Cooperative Transit Research and Development Program April 1992)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Davies describes a method for monitoring, comparing, and communicating with users regarding travel data.</p>
<p>monitoring travel data associated with the vehicle;</p>	<p>Davies describes methods for monitoring travel data associated with a vehicle:</p> <p>Davies describes measuring the position of a vehicle through methods including (alone or in combination) Global Position System (GPS), RDSS, U.S. Navy Transit System, LORAN-C, infra-red beacons radio-transmitter signposts (including odometer-assisted signpost systems), dead reckoning (including signpost-assisted dead reckoning), inductive loop detectors, vehicle-based transponders, and similar methods.</p> <p>Davies describes monitoring travel data by transmitting location information (or processed data) from the vehicle or remote device to a central computer system at regular intervals.</p> <p><i>See Davies at 53-62, 119-121.</i></p>

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<p>comparing planned timing of the vehicle along a route to updated vehicle status information;</p>	<p>Davies describes a method for comparing planned timing of a vehicle along a route to updated vehicle status information:</p> <p>Davies describes comparing the vehicle's actual speed and position with the planned vehicle route and schedule.</p> <p>Davies also discloses using this information to determine whether the vehicle is on, ahead of, or behind schedule.</p> <p><i>See Davies at 11-14, 53-62, 75-78, 88-89, 119-121.</i></p>
<p>contacting a user communications device before the vehicle reaches a vehicle stop along the route; and</p>	<p>Davies describes a method for contacting a user communications device before a vehicle reaches a vehicle stop along the route:</p> <p>Davies describes contacting user communications devices, including (alone or in combination) via telephone, cable television, teletext, videotex, Minitel, Teletel, in-vehicle displays, and similar methods.</p> <p>Davies also describes contacting the user communications device prior to the vehicle's arrival at a stop along the vehicle's route.</p> <p><i>See Davies at 11-14, 22, 59, 75-78, 88-89, 118-119.</i></p>

1 informing the user of the vehicle delay with
2 respect to the vehicle stop and of updated
3 impending arrival of the vehicle at the
4 vehicle stop, based upon the updated vehicle
5 status information and the planned timing.

Davies describes a method for informing a user
of the vehicle delay with respect to a vehicle
stop and of updated impending arrival of the
vehicle at the vehicle stop, based upon the
updated vehicle status information and the
planned timing:

Davies includes a description of
informing the user of vehicle delays from
schedule.

Davies includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

*See Davies at 11-14, 22, 43, 59, 75-78, 88-89,
118-119.*

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 102 (ANTICIPATION)

INVALIDITY CLAIM CHART

**Casey, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART”
(U.S. DOT April 1991)**

<p>United States Patent No. 7,030,781 (“the ‘781 patent”)</p>	<p>Casey, et al., Advanced Public Transportation Systems: The State of the Art (U.S. DOT April 1991)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Casey describes a method for monitoring, comparing, and communicating with users regarding travel data.</p>
<p>monitoring travel data associated with the vehicle;</p>	<p>Casey describes methods for monitoring travel data associated with a vehicle:</p> <p>Casey describes measuring the position of a vehicle through methods including Global Position System (GPS), LORAN-C, radio-transmitter signposts (including odometer-assisted signpost systems), dead reckoning (including signpost-assisted dead reckoning), and inductive loop detectors.</p> <p>Casey describes monitoring travel data by transmitting location information from the vehicle or remote device to a central computer system at regular intervals.</p> <p><i>See Casey at xiii, 28-29, 30, 32- 40.</i></p>
<p>comparing planned timing of the vehicle along a route to updated vehicle status information;</p>	<p>Casey describes a method for comparing planned timing of a vehicle along a route to updated vehicle status information:</p> <p>Casey describes comparing the vehicle’s actual speed and position with the planned vehicle route and schedule.</p> <p>Cases also discloses using this information to determine whether the vehicle is on, ahead of, or behind schedule.</p> <p><i>See Casey at 6, 21, 22-23, 28-29, 30, 33, 35, 36.</i></p>

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contacting a user communications device before the vehicle reaches a vehicle stop along the route; and

Casey describes a method for contacting a user communications device before a vehicle reaches a vehicle stop along the route:

Casey describes contacting user communications devices, including via telephone, cable television, teletext, minitel, in-vehicle displays, and the Internet.

Casey also describes contacting the user communications device prior to the vehicle's arrival at a stop along the vehicle's route.

See Casey at ix, xiii, 6, 7, 8, 20, 22-23, 28-29.

informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.

Casey describes a method for informing a user of the vehicle delay with respect to a vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing:

Casey includes a description of informing the user of vehicle delays from schedule.

Casey includes a description of informing the user of updated estimates of vehicle arrival times based on vehicle location and status information and the planned vehicle route.

See Casey at 6, 7, 8, 20, 21, 22-23, 28-29, 35.

UNITED STATES PATENT NO. 7,030,781
35 U.S.C. § 103 (OBVIOUSNESS)
INVALIDITY CLAIM CHART

COMBINATION OF:

**Labell, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART
UPDATE ’92” (U.S. DOT April 1992)**

COMBINED WITH

**Casey, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART”
(U.S. DOT April 1991)**

Sound Transit believes each prior art reference cited in this claim chart invalidates the claims of the patents-in-suit via anticipation under 35 U.S.C. § 102. Nevertheless, insofar as the claims of the patent have not yet been construed and discovery has not yet been obtained, including from Plaintiffs, Sound Transit submits these Section 103 disclosures as further bases of patent invalidity irrespective of the independent grounds for invalidity under 35 U.S.C. §§ 101, 102, and 112. In addition, insofar as the prior art of record, including the prior art cited on pages 1-5 of the patent-in-suit and in the prosecution history thereof, is cumulative and redundant with parts of the references cited in this claim chart, that prior art of record is incorporated by reference herein.

<p style="text-align: center;">United States Patent No. 7,030,781 (“the ‘781 patent”)</p>	<p style="text-align: center;">Labell, et al., Advanced Public Transportation Systems: The State of the Art <i>Update</i> ’92 (U.S. DOT April 1992) COMBINED WITH Casey, et al., Advanced Public Transportation Systems: The State of the Art (U.S. DOT April 1991)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Labell and Casey, in combination, describe a method for monitoring, comparing, and communicating with users regarding travel data.</p>

1 monitoring travel data associated with the
2 vehicle;

3 Labell and Casey, in combination, describe
4 methods for monitoring travel data associated
5 with a vehicle:

6 Labell describes measuring the position
7 of a vehicle through methods including
8 Global Position System (GPS), LORAN-
9 C, radio-transmitter signposts (including
10 odometer-assisted signpost systems),
11 dead reckoning (including signpost-
12 assisted dead reckoning), inductive loop
13 detectors, and combinations of these and
14 similar approaches.

15 Labell describes monitoring travel data
16 by transmitting location information (or
17 processed data or exception reports) from
18 the vehicle or remote device to a central
19 computer system at regular intervals.

20 *See* Labell at xiii-xiv, 44-55.

21 Casey describes measuring the position
22 of a vehicle through methods including
23 Global Position System (GPS), LORAN-
24 C, radio-transmitter signposts (including
25 odometer-assisted signpost systems),
26 dead reckoning (including signpost-
assisted dead reckoning), and inductive
loop detectors.

Casey describes monitoring travel data
by transmitting location information from
the vehicle or remote device to a central
computer system at regular intervals.

See Casey at xiii, 28-29, 30, 32- 40.

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comparing planned timing of the vehicle along a route to updated vehicle status information;

Labell and Casey, in combination describe a method for comparing planned timing of a vehicle along a route to updated vehicle status information:

Labell describes comparing the vehicle's actual speed and position with the planned vehicle route and schedule.

Labell also discloses using this information to determine whether the vehicle is on, ahead of, or behind schedule.

See Labell at xii-xiv, 5, 31, 44-47, 51-52, 53, 54, 55, 56-57, 72-77.

Casey describes comparing the vehicle's actual speed and position with the planned vehicle route and schedule.

Cases also discloses using this information to determine whether the vehicle is on, ahead of, or behind schedule.

See Casey at 6, 21, 22-23, 28-29, 30, 33, 35, 36.

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contacting
a user communications device
before the vehicle reaches a vehicle stop
along the route; and

Labell and Casey, in combination, describe a method for contacting a user communications device before a vehicle reaches a vehicle stop along the route:

Labell describes contacting user communications devices, including via telephone, cable television, teletext, audiotex, videotex, cellular telephone, voicemail, in-vehicle displays and communication devices, electronic kiosks, and through personal computers.

Labell also describes contacting the user communications device prior to the vehicle's arrival at a stop along the vehicle's route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 52, 54, 56, 72-77.

Casey describes contacting user communications devices, including via telephone, cable television, teletext, minitel, in-vehicle displays, and the Internet.

Casey also describes contacting the user communications device prior to the vehicle's arrival at a stop along the vehicle's route.

See Casey at ix, xiii, 6, 7, 8, 20, 22-23, 28-29.

1 informing the user of the vehicle delay with
2 respect to the vehicle stop and of updated
3 impending arrival of the vehicle at the
4 vehicle stop, based upon the updated vehicle
5 status information and the planned timing.

Labell and Casey describe, in combination, a
method for informing a user of the vehicle delay
with respect to a vehicle stop and of updated
impending arrival of the vehicle at the vehicle
stop, based upon the updated vehicle status
information and the planned timing:

Labell includes a description of
informing the user of vehicle delays from
schedule.

Labell includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 43, 44, 52,
54, 56, 72-77.

Casey includes a description of
informing the user of vehicle delays from
schedule.

Casey includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Casey at 6, 7, 8, 20, 21, 22-23, 28-29, 35

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 103 (OBVIOUSNESS)

INVALIDITY CLAIM CHART

COMBINATION OF:

Labell, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART UPDATE '92” (U.S. DOT April 1992)

COMBINED WITH

Casey, et al., “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART” (U.S. DOT April 1991)

AND/OR

Gilles David, “THE FRENCH EXPERIENCE WITH AUTOMATIC VEHICLE LOCATION IN URBAN TRANSPORTATION SYSTEMS” (Report Presented at the International Conference on Automatic Vehicle Location System, Ottawa, Canada, September 19-21, 1988)

Sound Transit believes each prior art reference cited in this claim chart invalidates the claims of the patents-in-suit via anticipation under 35 U.S.C. § 102. Nevertheless, insofar as the claims of the patent have not yet been construed and discovery has not yet been obtained, including from Plaintiffs, Sound Transit submits these Section 103 disclosures as further bases of patent invalidity irrespective of the independent grounds for invalidity under 35 U.S.C. §§ 101, 102, and 112. In addition, insofar as the prior art of record, including the prior art cited on pages 1-5 of the patent-in-suit and in the prosecution history thereof, is cumulative and redundant with parts of the references cited in this claim chart, that prior art of record is incorporated by reference herein.

NOTE: This claim chart is based on the copy of the David reference currently available as produced together herewith. The David reference is in the public domain, and Sound Transit reserves the right to update and supplement this disclosure and document production to the extent Sound Transit locates, through discovery or otherwise, a better or more complete copy of the David reference.

**United States Patent No. 7,030,781
 (“the ‘781 patent’”)**

Labell, et al., Advanced
Public Transportation Systems:
The State of the Art *Update* '92 (U.S. DOT
April 1992)
COMBINED WITH
Casey, et al., Advanced Public Transportation
Systems:
The State of the Art (U.S. DOT April 1991)
AND/OR
Gilles David, “The French Experience with
Automatic Vehicle Location in Urban
Transportation Systems” (Report Presented at
the International Conference on Automatic
Vehicle Location System, Ottawa, Canada,
September 19-21, 1988)

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Claim 1. A method, comprising the steps of:	Labell and Casey and/or David, in combination, describe a method for monitoring, comparing, and communicating with users regarding travel data.
monitoring travel data associated with the vehicle;	<p>Labell and Casey and/or David, in combination, describe methods for monitoring travel data associated with a vehicle:</p> <p>Labell describes measuring the position of a vehicle through methods including Global Position System (GPS), LORAN-C, radio-transmitter signposts (including odometer-assisted signpost systems), dead reckoning (including signpost-assisted dead reckoning), inductive loop detectors, and combinations of these and similar approaches.</p> <p>Labell describes monitoring travel data by transmitting location information (or processed data or exception reports) from the vehicle or remote device to a central computer system at regular intervals. <i>See Labell at xiii-xiv, 44-55.</i></p> <p>Casey describes measuring the position of a vehicle through methods including Global Position System (GPS), LORAN-C, radio-transmitter signposts (including odometer-assisted signpost systems), dead reckoning (including signpost-assisted dead reckoning), and inductive loop detectors.</p> <p>Casey describes monitoring travel data by transmitting location information from the vehicle or remote device to a central computer system at regular intervals. <i>See Casey at xiii, 28-29, 30, 32- 40.</i></p> <p>David describes methods for monitoring travel data associated with a vehicle and transmitting that data to a central location, including at least using odometer readings together with door opening indicators and a system map, signpost locators, signpost locators and odometer readings, and radio transmitters onboard the vehicle picked up by signpost or fixed location detectors. <i>See David at 5, 6, 7, 10, 11, 12, 13, 14, 15, 16.</i></p>

1 comparing planned timing of the vehicle
2 along a route to updated vehicle status
3 information;

Labell and Casey and/or David, in combination
describe a method for comparing planned timing
of a vehicle along a route to updated vehicle
status information:

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Labell describes comparing the vehicle's
actual speed and position with the
planned vehicle route and schedule.

Labell also discloses using this
information to determine whether the
vehicle is on, ahead of, or behind
schedule.

See Labell at xii-xiv, 5, 31, 44-47, 51-52, 53, 54,
55, 56-57, 72-77.

Casey describes comparing the vehicle's
actual speed and position with the
planned vehicle route and schedule.

Casey also discloses using this
information to determine whether the
vehicle is on, ahead of, or behind
schedule.

See Casey at 6, 21, 22-23, 28-29, 30, 33, 35, 36.

David describes a method for comparing
planned timing of a vehicle along a route
to updated vehicle status information by
comparing the vehicle's actual speed and
position with the planned vehicle route
and schedule and determining whether
the vehicle is on, ahead of, or behind
schedule. David discloses performing
this calculation either onboard the
vehicle or at a central location.

See David at 6, 8, 10, 11, 12, 13, 15, 16.

1 contacting
2 a user communications device
3 before the vehicle reaches a vehicle stop
4 along the route; and

Labell and Casey and/or David, in combination,
describe a method for contacting a user
communications device
before a vehicle reaches a vehicle stop along the
route:

Labell describes contacting user
communications devices, including via
telephone, cable television, teletext,
audiotex, videotex, cellular telephone,
voicemail, in-vehicle displays and
communication devices, electronic
kiosks, and through personal computers.

Labell also describes contacting the user
communications device prior to the
vehicle's arrival at a stop along the
vehicle's route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 52, 54, 56,
72-77.

Casey describes contacting user
communications devices, including via
telephone, cable television, teletext,
minitel, in-vehicle displays, and the
Internet.

Casey also describes contacting the user
communications device prior to the
vehicle's arrival at a stop along the
vehicle's route.

See Casey at ix, xiii, 6, 7, 8, 20, 22-23, 28-29.

David describes a method for contacting
a user communications device before a
vehicle reaches a vehicle stop along the
route, including at least video radio,
telephone or Minitel system telematics,
and including while a user is at home or
at a bus stop.

See David at 4, 8, 13.

1 informing the user of the vehicle delay with
2 respect to the vehicle stop and of updated
3 impending arrival of the vehicle at the
4 vehicle stop, based upon the updated vehicle
5 status information and the planned timing.

Labell and Casey and/or David, in combination,
a method for informing a user of the vehicle
delay with respect to a vehicle stop and of
updated impending arrival of the vehicle at the
vehicle stop, based upon the updated vehicle
status information and the planned timing:

Labell includes a description of
informing the user of vehicle delays from
schedule.

Labell includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 43, 44, 52,
54, 56, 72-77.

Casey includes a description of
informing the user of vehicle delays from
schedule.

Casey includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Casey at 6, 7, 8, 20, 21, 22-23, 28-29, 35.

David describes a method for informing a
user of the vehicle delay with respect to a
vehicle stop and of updated impending
arrival of the vehicle at the vehicle stop,
based upon the updated vehicle status
information and the planned timing:

See David at 4, 8, 13.

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 103 (OBVIOUSNESS)

INVALIDITY CLAIM CHART

COMBINATION OF:

Labell, *et al.*, “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART UPDATE '92” (U.S. DOT April 1992)

COMBINED WITH

Casey, *et al.*, “ADVANCED PUBLIC TRANSPORTATION SYSTEMS: THE STATE OF THE ART” (U.S. DOT April 1991)

AND/OR

Gilles David, “THE FRENCH EXPERIENCE WITH AUTOMATIC VEHICLE LOCATION IN URBAN TRANSPORTATION SYSTEMS” (Report Presented at the International Conference on Automatic Vehicle Location System, Ottawa, Canada, September 19-21, 1988)

AND/OR

Davies, *et al.*, “ASSESSMENT OF ADVANCED TECHNOLOGIES FOR TRANSIT AND RIDESHARE APPLICATIONS” (NCTRP July 1991)

Sound Transit believes each prior art reference cited in this claim chart invalidates the claims of the patents-in-suit via anticipation under 35 U.S.C. § 102. Nevertheless, insofar as the claims of the patent have not yet been construed and discovery has not yet been obtained, including from Plaintiffs, Sound Transit submits these Section 103 disclosures as further bases of patent invalidity irrespective of the independent grounds for invalidity under 35 U.S.C. §§ 101, 102, and 112. In addition, insofar as the prior art of record, including the prior art cited on pages 1-5 of the patent-in-suit and in the prosecution history thereof, is cumulative and redundant with parts of the references cited in this claim chart, that prior art of record is incorporated by reference herein.

NOTE: This claim chart is based on the copy of the David reference currently available as produced together herewith. The David reference is in the public domain, and Sound Transit reserves the right to update and supplement this disclosure and document production to the extent Sound Transit locates, through discovery or otherwise, a better or more complete copy of the David reference.

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<p>United States Patent No. 7,030,781 ("the '781 patent")</p>	<p>Labell, et al., Advanced Public Transportation Systems: The State of the Art <i>Update</i> '92 (U.S. DOT April 1992) COMBINED WITH Casey, et al., Advanced Public Transportation Systems: The State of the Art (U.S. DOT April 1991) AND/OR Gilles David, "The French Experience with Automatic Vehicle Location in Urban Transportation Systems" (Report Presented at the International Conference on Automatic Vehicle Location System, Ottawa, Canada, September 19-21, 1988) AND/OR Davies, et al., Assessment of Advanced Technologies For Transit and Rideshare Applications (National Cooperative Transit Research and Development Program April 1992)</p>
<p>Claim 1. A method, comprising the steps of:</p>	<p>Labell and Casey and/or David and/or Davies, in combination, describe a method for monitoring, comparing, and communicating with users regarding travel data.</p>

1 monitoring travel data associated with the
2 vehicle;

Labell and Casey and/or David and/or Davies, in combination, describe methods for monitoring travel data associated with a vehicle:

3 Labell describes measuring the position
4 of a vehicle through methods including
5 Global Position System (GPS), LORAN-
6 C, radio-transmitter signposts (including
7 odometer-assisted signpost systems),
8 dead reckoning (including signpost-
9 assisted dead reckoning), inductive loop
10 detectors, and combinations of these and
11 similar approaches.

12 Labell describes monitoring travel data
13 by transmitting location information (or
14 processed data or exception reports) from
15 the vehicle or remote device to a central
16 computer system at regular intervals.
17 *See* Labell at xiii-xiv, 44-55.

18 Casey describes measuring the position
19 of a vehicle through methods including
20 Global Position System (GPS), LORAN-
21 C, radio-transmitter signposts (including
22 odometer-assisted signpost systems),
23 dead reckoning (including signpost-
24 assisted dead reckoning), and inductive
25 loop detectors.

26 Casey describes monitoring travel data
by transmitting location information from
the vehicle or remote device to a central
computer system at regular intervals.
See Casey at xiii, 28-29, 30, 32- 40.

David describes methods for monitoring
travel data associated with a vehicle and
transmitting that data to a central
location, including at least using
odometer readings together with door
opening indicators and a system map,
signpost locators, signpost locators and
odometer readings, and radio transmitters
onboard the vehicle picked up by
signpost or fixed location detectors.
See David at 5, 6, 7, 10, 11, 12, 13, 14, 15, 16.

Davies describes measuring the position
of a vehicle through methods including
(alone or in combination) Global Position
System (GPS), RDSS, U.S. Navy Transit
System, LORAN-C, infra-red beacons
radio-transmitter signposts (including
odometer-assisted signpost systems),
dead reckoning (including signpost-
assisted dead reckoning), inductive loop
detectors, vehicle-based transponders,
and similar methods.

1 comparing planned timing of the vehicle
2 along a route to updated vehicle status
3 information;

Labell and Casey and/or David and/or Davies, in
combination describe a method for comparing
planned timing of a vehicle along a route to
updated vehicle status information:

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Labell describes comparing the vehicle's
actual speed and position with the
planned vehicle route and schedule.

Labell also discloses using this
information to determine whether the
vehicle is on, ahead of, or behind
schedule.

See Labell at xii-xiv, 5, 31, 44-47, 51-52, 53, 54,
55, 56-57, 72-77.

Casey describes comparing the vehicle's
actual speed and position with the
planned vehicle route and schedule.

Casey also discloses using this
information to determine whether the
vehicle is on, ahead of, or behind
schedule.

See Casey at 6, 21, 22-23, 28-29, 30, 33, 35, 36.

David describes a method for comparing
planned timing of a vehicle along a route
to updated vehicle status information by
comparing the vehicle's actual speed and
position with the planned vehicle route
and schedule and determining whether
the vehicle is on, ahead of, or behind
schedule. David discloses performing
this calculation either onboard the
vehicle or at a central location.

See David at 6, 8, 10, 11, 12, 13, 15, 16.

Davies describes comparing the vehicle's
actual speed and position with the
planned vehicle route and schedule.

Davies also discloses using this
information to determine whether the
vehicle is on, ahead of, or behind
schedule.

See Davies at 11-14, 53-62, 75-78, 88-89, 119-
121.

1 contacting
2 a user communications device
3 before the vehicle reaches a vehicle stop
4 along the route; and

Labell and Casey and/or David, in combination,
describe a method for contacting a user
communications device
before a vehicle reaches a vehicle stop along the
route:

Labell describes contacting user
communications devices, including via
telephone, cable television, teletext,
audiotex, videotex, cellular telephone,
voicemail, in-vehicle displays and
communication devices, electronic
kiosks, and through personal computers.

Labell also describes contacting the user
communications device prior to the
vehicle's arrival at a stop along the
vehicle's route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 52, 54, 56,
72-77.

Casey describes contacting user
communications devices, including via
telephone, cable television, teletext,
minitel, in-vehicle displays, and the
Internet.

Casey also describes contacting the user
communications device prior to the
vehicle's arrival at a stop along the
vehicle's route.

See Casey at ix, xiii, 6, 7, 8, 20, 22-23, 28-29.

David describes a method for contacting
a user communications device before a
vehicle reaches a vehicle stop along the
route, including at least video radio,
telephone or Minitel system telematics,
and including while a user is at home or
at a bus stop.

See David at 4, 8, 13.

Davies describes contacting user
communications devices, including
(alone or in combination) via telephone,
cable television, teletext, videotex,
Minitel, Teletel, in-vehicle displays, and
similar methods.

Davies also describes contacting the user
communications device prior to the
vehicle's arrival at a stop along the
vehicle's route.

See Davies at 11-14, 22, 59, 75-78, 88-89, 118-
119.

1 informing the user of the vehicle delay with
2 respect to the vehicle stop and of updated
3 impending arrival of the vehicle at the
4 vehicle stop, based upon the updated vehicle
5 status information and the planned timing.

Labell and Casey and/or David, in combination,
a method for informing a user of the vehicle
delay with respect to a vehicle stop and of
updated impending arrival of the vehicle at the
vehicle stop, based upon the updated vehicle
status information and the planned timing:

Labell includes a description of
informing the user of vehicle delays from
schedule.

Labell includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Labell at vii-ix, x-xi, 5-12, 25-31, 43, 44, 52,
54, 56, 72-77.

Casey includes a description of
informing the user of vehicle delays from
schedule.

Casey includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Casey at 6, 7, 8, 20, 21, 22-23, 28-29, 35.

David describes a method for informing a
user of the vehicle delay with respect to a
vehicle stop and of updated impending
arrival of the vehicle at the vehicle stop,
based upon the updated vehicle status
information and the planned timing:

See David at 4, 8, 13.

Davies includes a description of
informing the user of vehicle delays from
schedule.

Davies includes a description of
informing the user of updated estimates
of vehicle arrival times based on vehicle
location and status information and the
planned vehicle route.

See Davies at 11-14, 22, 43, 59, 75-78, 88-89,
118-119.

UNITED STATES PATENT NO. 7,030,781

35 U.S.C. § 112 (ENABLEMENT AND WRITTEN DESCRIPTION)

INVALIDITY CLAIM CHART

United States Patent No. 7,030,781 ("the '781 patent'")	INVALIDITY (35 U.S.C. § 112, ¶1)
Claim 1. A method, comprising the steps of:	The specification of the '781 patent does not describe the purported invention in such full, clear, concise, and exact terms as to enable one of ordinary skill in the art to practice the invention without undue experimentation.
monitoring travel data associated with the vehicle;	The specification of the '781 patent does not describe how the monitoring of travel data associated with a vehicle is to be accomplished by a vehicle control unit in such full, clear, concise, and exact terms as to enable one of ordinary skill in the art to practice the invention without undue experimentation.
comparing planned timing of the vehicle along a route to updated vehicle status information;	The specification of the '781 patent does not describe how the planned timing of a vehicle along a route is to be compared to updated vehicle status information in such full, clear, concise, and exact terms as to enable one of ordinary skill in the art to practice the invention without undue experimentation.
contacting a user communications device before the vehicle reaches a vehicle stop along the route; and	The specification of the '781 patent does not describe how a user communications device is to be contacted by a base station control unit before the vehicle reaches a vehicle stop along the route in such full, clear, concise, and exact terms as to enable one of ordinary skill in the art to practice the invention without undue experimentation.
informing the user of the vehicle delay with respect to the vehicle stop and of updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing.	The specification of the '781 patent does not describe how a user is to be informed via a base station control unit of a vehicle delay with respect to a vehicle stop and of the updated impending arrival of the vehicle at the vehicle stop, based upon the updated vehicle status information and the planned timing, in such full, clear, concise, and exact terms as to enable one of ordinary skill in the art to practice the invention without undue experimentation.

1 DATED this 14th day of September, 2012.

2 Respectfully submitted,

3 STOEL RIVES LLP

4 /s/ Brian C. Park

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