

Exhibit D

U.S. Patent No. 8,649,971 – Hyundai Navigation Systems And Software

The following claim chart includes illustrations, diagrams, and references relating to exemplary Hyundai, Kia, and Genesis (collectively referred to as “Hyundai” for brevity herein) vehicles’ navigation systems, including the Standard 5th Generation Wide (“Gen5W”) and Premium 6th Generation (“Gen6”) infotainment systems. Various systems, components, model numbers, and technical excerpts specifically cited herein are intended to illustrate theories of infringement and are not intended to exclude other Hyundai systems or components from allegations of infringement. Upon information and belief, including based on public information and information appearing on Hyundai’s website, the infringement contentions and evidence of infringement set forth in these charts apply to each Hyundai vehicle equipped with Gen5W or Gen6 infotainment systems having navigation functionality, including those identified in Part II of Mel NavIP’s Disclosures.

To the extent that multiple cases of infringement are set forth in the below charts, if no reference is made to a specific case with respect to a claim or claim element, the evidence of infringement applies to all cases of infringement set forth for that claim, or the claim(s) on which that claim depends.

To the extent there are any differences between the accused instrumentalities and the following claim elements, any such differences are insubstantial, and the claim(s) is infringed under the doctrine of equivalents.

Claim	Claim Element	Evidence of Infringement
1[a]	A navigation device comprising:	Hyundai vehicles comprise a navigation device. For example, Hyundai, KIA, and Genesis (collectively, “Hyundai”) vehicles have a navigation device, such as the Standard Gen 5 Wide infotainment system found in the, <i>inter alia</i> , 2022 KIA EV6. <i>See, e.g.,</i>

Claim	Claim Element	Evidence of Infringement
		 <p>...</p>  <p>...</p>  <p>...</p> <div style="border: 1px solid black; padding: 10px;"> <p>Charging network integration connects you with 40,000+ charging stations throughout the US — including 400V DC fast chargers³ and higher — guiding you to the nearest charger along your route via the Navigation⁸ system.</p> </div> <p>2022 KIA EV6 Brochure, at pp. 1, 7 (MEL_HYUN_TECH_00000412, MEL_HYUN_TECH_00000418).</p>

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Claim	Claim Element	Evidence of Infringement
		<p>See also:</p> <div><h3>Navigation Menu overview</h3><p>You can use the navigation system conveniently through various functions on the Navigation Menu screen.</p><p>Perform any of the following methods:</p><ul style="list-style-type: none">On the All Menus screen, press Navigation Menu.On the control panel, press the [NAV] button.<p>The screenshot shows the 'Navigation Menu' screen of a car's infotainment system. At the top, there is a status bar with a back arrow (1), a home icon (13), and the time '12:00 AM'. Below this is a 'Settings' button (2). The main area contains a grid of icons: 'Places' (3), 'POI Categories' (4), 'Previous Destinations' (5), 'Saved Places' (6), 'Kia Dealerships' (7), and 'Cancel Route' (8). Below these are 'Route Overview' (9), 'Edit Route' (10), and 'Route Options' (11). At the bottom, there is a horizontal bar with 'Home' (12), 'Work', 'Favorite 1', 'Favorite 2', and 'Favorite 3' buttons.</p></div> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-2, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000552).</p> <p>See also:</p>

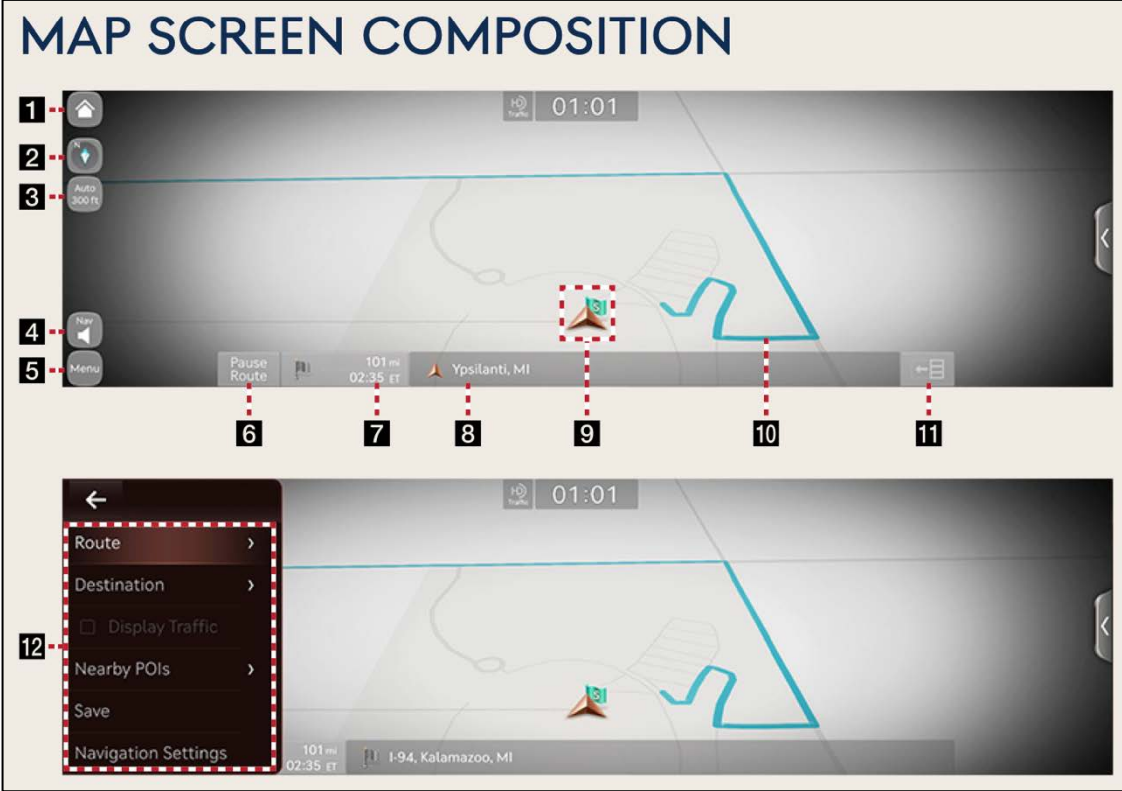
Claim	Claim Element	Evidence of Infringement																																							
		<div><div><h3>Map screen</h3><p>The map screen provides various functions and informations, as follows:</p></div><div><p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-6, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000556).</p><p>See also:</p><table><tr><th>Vehicle</th><th>Model</th><th>Navigation System</th><th>SW Version</th><th>MAP Version</th><th>Model Name</th></tr><tr><td rowspan="3">Cadenza</td><td>2017-18 Cadenza</td><td>Standard Gen4 Navigation</td><td>ST.YG.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>YGAS.S4AMN.US</td></tr><tr><td>2019 Cadenza</td><td>Standard Gen5 Navigation</td><td>YG19.USA.SOPV136.230410.STD_H</td><td>NAM.16.41.71.012.302.9</td><td>YGAS.S5AMC.US</td></tr><tr><td>2020 Cadenza</td><td>Standard Gen5W Navigation</td><td>YGPE.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>YGP19S.S5CMC.US</td></tr><tr><td rowspan="2">Carnival</td><td>2022 Carnival</td><td>Standard Gen5W Navigation</td><td>KA4.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>KA4AS.S5BMC.US</td></tr><tr><td>2023 Carnival</td><td>Standard Gen5W Navigation</td><td>KA4_23.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>KA4CS.S5BMC.US</td></tr><tr><td>EV6</td><td>2022-23 EV6</td><td>Standard Gen5W Navigation</td><td>CV_E.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>CVAE.S5BMC.US</td></tr></table><p>KIA Navigation Systems Overview at https://update.kia.com/US/EN/updateNoticePopup/1F1boL (MEL_HYUN_TECH_00000037) (yellow annotations added).</p></div></div>	Vehicle	Model	Navigation System	SW Version	MAP Version	Model Name	Cadenza	2017-18 Cadenza	Standard Gen4 Navigation	ST.YG.USA.E542.230419	NAM.16.41.41.712.003.3	YGAS.S4AMN.US	2019 Cadenza	Standard Gen5 Navigation	YG19.USA.SOPV136.230410.STD_H	NAM.16.41.71.012.302.9	YGAS.S5AMC.US	2020 Cadenza	Standard Gen5W Navigation	YGPE.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	YGP19S.S5CMC.US	Carnival	2022 Carnival	Standard Gen5W Navigation	KA4.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	KA4AS.S5BMC.US	2023 Carnival	Standard Gen5W Navigation	KA4_23.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	KA4CS.S5BMC.US	EV6	2022-23 EV6	Standard Gen5W Navigation	CV_E.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	CVAE.S5BMC.US
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		<p>For example, the navigation device of the Standard Gen5W infotainment system is equipped on the exemplary 2022 Kia EV6 as well as at least the 2022/2023 Hyundai Elantra, 2022/2023 Hyundai Elantra Hybrid, 2022/2023 Hyundai Elantra N, 2022/2023 Hyundai Ioniq 5, 2022 Hyundai Ioniq Electric, 2022 Hyundai Ioniq Hybrid, 2022 Hyundai Ioniq Plug-in Hybrid, 2023 Hyundai Ioniq 6, 2022/2023 Hyundai Kona, 2022/2023 Hyundai Kona Electric, 2022/2023 Hyundai Kona N, 2023 Hyundai Nexo Fuel Cell, 2022/2023 Hyundai Palisade, 2022/2023 Hyundai Santa Cruz, 2022/2023 Hyundai Santa Fe, 2022/2023 Hyundai Santa Fe Hybrid, 2022/2023 Hyundai Santa Fe Plug-in Hybrid, 2022/2023 Hyundai Sonata, 2022/2023 Hyundai Sonata Hybrid, 2022/2023 Hyundai Tucson, 2022/2023 Hyundai Tucson Hybrid, 2022/2023 Hyundai Tucson Plug-in Hybrid, 2022 Veloster N, 2022/2023 Hyundai Venue, 2022/2023 Kia Carnival, 2023 Kia EV6, 2022 Kia Forte 4Door, 2022/2023 Kia K5, 2022 Kia Niro, 2022/2023 Kia Niro Electric, 2023 Kia Niro Hybrid, 2022/2023 Kia Niro Plug-in Hybrid, 2022/2023/2024 Kia Seltos, 2022/2023 Kia Sorento, 2022/2023 Kia Sorento Hybrid, 2022/2023 Kia Sorento Plug-in Hybrid, 2022/2023 Kia Soul, 2022 Kia Soul Electric, 2022/2023 Kia Sportage, 2022/2023 Kia Sportage Hybrid, 2022/2023 Kia Sportage Plug-in Hybrid, 2022/2023 Kia Stingray, 2022/2023 Kia Telluride, and 2022/2023 Genesis G70.</p> <p>See https://update.hyundai.com/US/EN/updateNoticePopup/bapU9Q (MEL_HYUN_TECH_00000035-MEL_HYUN_TECH_00000036); see also https://update.kia.com/US/EN/updateNoticePopup/lF1boL (MEL_HYUN_TECH_00000037-MEL_HYUN_TECH_00000038); see also https://update.genesis.com/US/EN/updateNoticePopup/njAeO8 (MEL_HYUN_TECH_00000039).</p> <p>For example, Hyundai vehicles have a navigation device, such as the Premium 6th Generation (“Gen6”) infotainment system found in the, <i>inter alia</i>, 2021 Genesis G80.</p> <p>See, e.g.,</p>

Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Navigation – Routing Genesis G80 and GV80 How-To Genesis USA, at 1:00, at https://www.youtube.com/watch?v=aM90psllpM8 (MEL_HYUN_TECH_00001317).</p> <p><i>See also:</i></p> <div><p>Thank you for purchasing this Gen6 Premium Class Navigation.</p><p>This user's manual explains how to use the Gen6 Premium Class Navigation.</p><p>Before using the product, read the contents of this user's manual carefully and use this product safely.</p></div>

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Claim	Claim Element	Evidence of Infringement
		<p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p. 2, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000104).</p> <p><i>See also:</i></p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p. 27, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000129).</p>

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		<p>For example, the navigation system of the Gen6 infotainment system is equipped on the exemplary 2021 Genesis G80 as well as at least the 2023 Genesis Electrified G80, 2022/2023 Genesis G80, 2022/2023 Genesis GV70, 2023 Genesis Electrified GV70, and 2022/2023/2024 Genesis GV80.</p> <p><i>See, e.g.,</i></p> <table> <tr> <th>Vehicle</th><th>Model</th><th>Navigation System</th><th>SW Version</th><th>MAP Version</th><th>Model Name</th></tr> <tr> <td>Electrified G80</td><td>2023 Electrified G80</td><td>Premium Gen6 Navigation</td><td>RG3.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>RG3AE.P6CLC.US</td></tr> <tr> <td rowspan="3">G70</td><td>2019-21 G70</td><td>Standard Gen5 Navigation</td><td>IK.USA.SOP.V136.230410.STD_H</td><td>NAM.16.41.71.012.302.9</td><td>IKAS.S5AMC.US</td></tr> <tr> <td>2022-23 G70</td><td>Standard Gen5W Navigation</td><td>IKFL.USA.S5W.M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>IKFAS.S5BMC.US</td></tr> <tr> <td></td><td></td><td></td><td></td><td></td></tr> <tr> <td rowspan="14">G80</td><td>2014-16 G80 (8 in. Touchscreen)</td><td>Standard Gen4 Navigation</td><td>ST.DH.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>DHAS.S4AMC.US</td></tr> <tr> <td>2014 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2015 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH15MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2016 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH16MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2017 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH17MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2017 G80 (8 in. Touchscreen)</td><td>Standard Gen4 Navigation</td><td>ST.DH17.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>DHBS.S4AMC.US</td></tr> <tr> <td>2018 G80 (8 in. 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G80	2014-16 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DH.USA.E542.230419	NAM.16.41.41.712.003.3	DHAS.S4AMC.US																																																																																																																																																														
	2014 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA																																																																																																																																																														
	2015 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH15MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA																																																																																																																																																														
	2016 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH16MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA																																																																																																																																																														
	2017 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH17MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA																																																																																																																																																														
	2017 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DH17.USA.E542.230419	NAM.16.41.41.712.003.3	DHBS.S4AMC.US																																																																																																																																																														
	2018 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DHPE.USA.E542.230419	NAM.16.41.41.712.003.3	DHCS.S4AMN.US																																																																																																																																																														
	2018 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DHPE.USA.SOP.xx.017	NAM.16.41.41.712.102.3	DHBS.P2ALC.NA																																																																																																																																																														
	2019 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH18MY.USA.SOP.xx.017	NAM.16.41.41.712.102.3	DHCS.P2ALC.NA																																																																																																																																																														
	2019-20 G80 (8 in. Touchscreen)	Standard Gen5 Navigation	DH19.USA.SOP.V136.230410.STD_H	NAM.16.41.71.012.302.9	DHAS.S5AMC.US																																																																																																																																																														
	2020 G80 (9.2 in. Touchscreen)	Premium Gen5 Navigation	DH19MY.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	DHAS.P5ALC.NA																																																																																																																																																														
	2021 G80	Premium Gen6 Navigation	RG3.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3AS.P6CLC.US																																																																																																																																																														
	2022 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US																																																																																																																																																														
	2023 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US																																																																																																																																																														
G90	2017-19 G90	Harman DIS2	R31.0.013A	DB_HMCDIS2S_NA_NA_S_0000_E01.0035	P.AVN3																																																																																																																																																														
	2020 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIAS.P5BLC.NA																																																																																																																																																														
	2021-22 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIBS.P5BLC.NA																																																																																																																																																														
	2023 G90	ccIC Navigation	RS4.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	RS4AS.PCBLC.US																																																																																																																																																														
GV60	2023 GV60	ccIC Navigation	JW.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	JWAE.PCBLC.US																																																																																																																																																														
GV70	2022 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLC.US																																																																																																																																																														
	2023 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLN.A.US																																																																																																																																																														
GV80	2021 GV80	Premium Gen6 Navigation	JX1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1AS.P6CLC.US																																																																																																																																																														
	2022 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																														
	2023 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																														
	2024 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																														

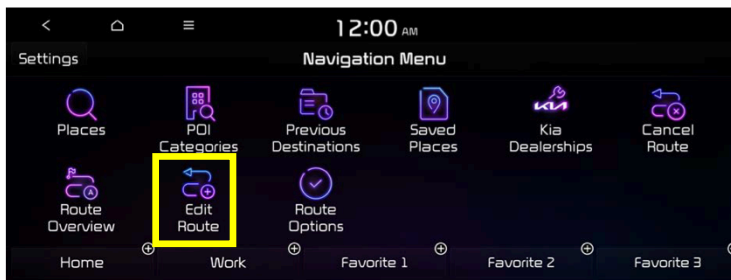
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Claim	Claim Element	Evidence of Infringement
		Genesis Navigation Systems Overview at https://update.genesis.com/US/EN/updateNoticePopup/njAeO8 (MEL_HYUN_TECH_00000039) (yellow annotations added).
1[b]	a setting unit configured to set waypoints and a destination;	<p>Hyundai's navigation device comprises a setting unit configured to set waypoints and a destination.</p> <p>For example, Hyundai's navigation device has a setting unit to set waypoints, <i>e.g.</i>, stops and/or intermediary destinations on the way to the final destination (represented as a blue flag icon in the images below), and a destination, <i>e.g.</i>, a final destination the route is guiding the vehicle to (represented as a checkered flag icon in the images below).</p> <p><i>See, e.g.</i>, Gen5W:</p>

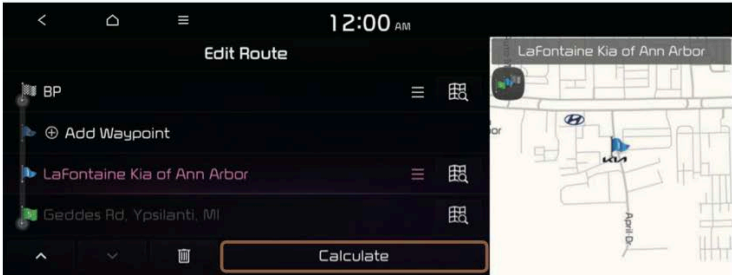
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Claim	Claim Element	Evidence of Infringement
		<p>Editing the route</p> <p>You can edit the waypoints on the way to the destination. You can add up to two waypoints.</p> <p>Setting a waypoint</p> <p>You can search for the desired place and set it as a waypoint.</p> <p>1 On the Navigation Menu screen, press the desired search method to search for a waypoint.</p>  <p>Available icons and their arrangement may differ depending on the vehicle model and specifications.</p> <p>For more information about the waypoint search: ► see "Searching by keyword," "Searching from previous destinations," "Searching for nearby points of interest(POI)," "Searching for restaurants," "Searching for emergency services."</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-17, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000567).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>2 On the map for a search, press Add Waypoint.</p> <p>The selected waypoint is added to the route.</p>  <p>3 After adding waypoints, press Calculate.</p> <p>To access the online user's manual on the Edit Route screen, press  ► User's Manual on Web (QR Code) and then scan the displayed QR code.</p>  <p>4 Select the updated route and then press Start Guidance.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-18, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000568) (yellow annotations added).</p> <p>See also:</p>

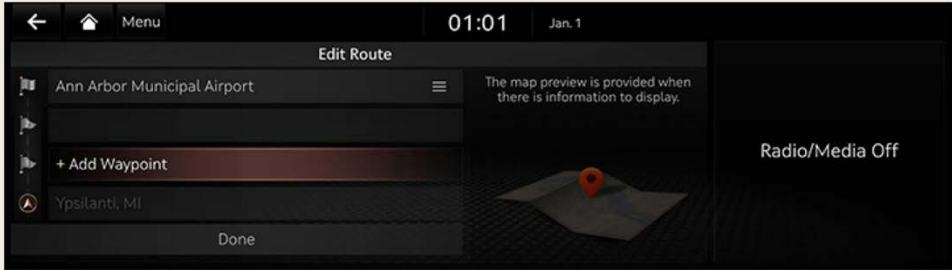
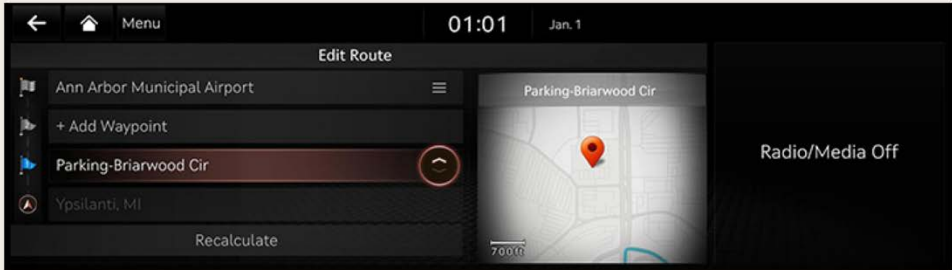
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Claim	Claim Element	Evidence of Infringement
		<p>3 After editing the route, press Reroute.</p> <p>4 Select the updated route and then press Start Guidance.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-19, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000569) (yellow annotations added).</p> <p>See also:</p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001331) (yellow annotations added).</p> <p>See, e.g., Gen6:</p>

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Claim	Claim Element	Evidence of Infringement
		<p>EDIT ROUTE</p> <p>This feature allows you to travel through the searched routes by editing the current route. Waypoints can be added/deleted/edited and the order can be changed.</p> <p>ADDING WAYPOINTS</p> <p>Adds waypoint(s) after setting the destination. Up to 2 waypoints can be added. If 2 waypoints have been added, add a new waypoint after deleting an added waypoint.</p> <ol style="list-style-type: none"> 1. Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen.  <ol style="list-style-type: none"> 2. Press [Add Waypoint]. 3. Set a waypoint by using search menu.  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.58, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000160).</p>

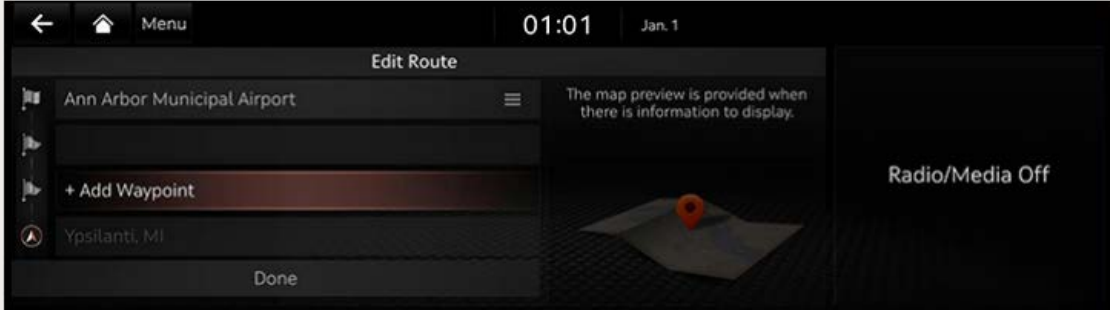
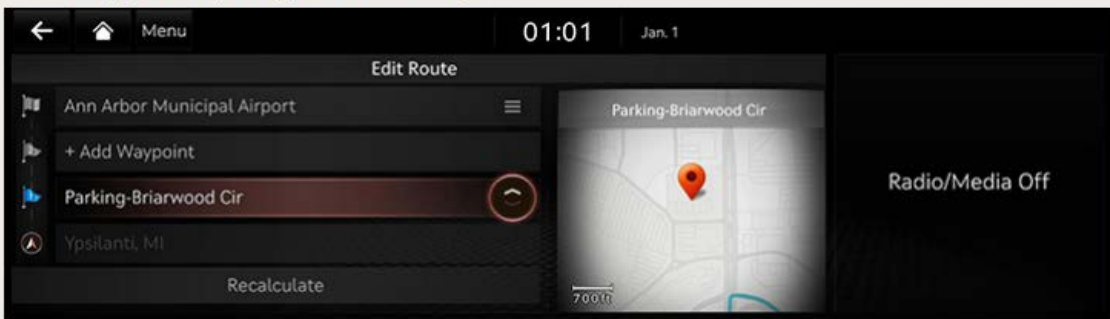
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Claim	Claim Element	Evidence of Infringement
1[c]	a route searching unit configured to search for a whole route leading to the destination via the waypoints set by said setting unit;	<p>Hyundai's navigation device comprises a route searching unit configured to search for a whole route leading to the destination via the waypoints set by said setting unit.</p> <p>For example, Hyundai's navigation device has a route searching unit that searches for a whole route leading to the destination discussed above (represented as a checkered flag icon in the images below) via the waypoints discussed above (represented as a blue flag icon in the images below) set by the setting unit discussed above.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001331) (yellow annotations added).</p> <p><i>See, e.g., Gen6:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>ADDING WAYPOINTS</p> <p>Adds waypoint(s) after setting the destination. Up to 2 waypoints can be added. If 2 waypoints have been added, add a new waypoint after deleting an added waypoint.</p> <ol style="list-style-type: none"> Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen.  <ol style="list-style-type: none"> Press [Add Waypoint]. Set a waypoint by using search menu.  <ol style="list-style-type: none"> Repeat Step 2 to 3 to add another waypoint. Press [Recalculate]. Select desired route conditions.

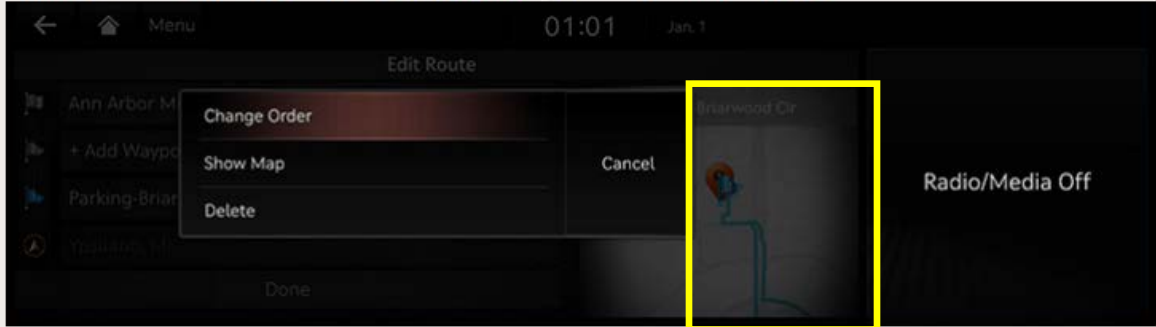
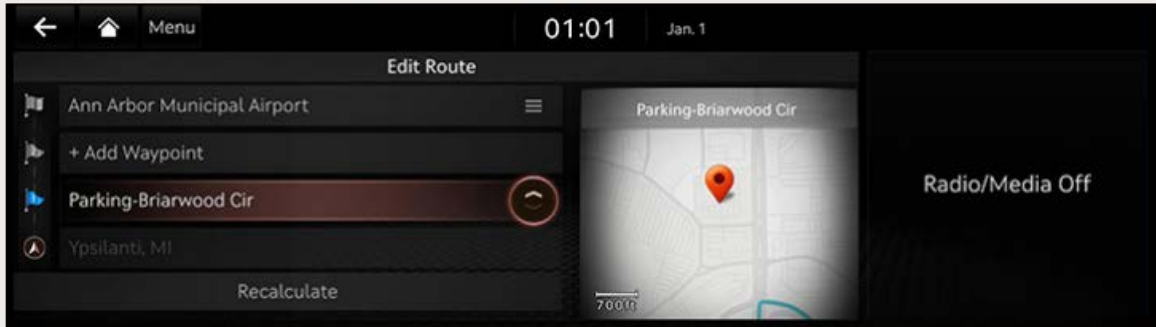
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Claim	Claim Element	Evidence of Infringement
		<p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.58, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000160) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>CHANGING ROUTE ORDER</p> <p>In case of any added waypoint, the route order between the waypoints or between the waypoint(s) and the destination can be changed.</p> <ol style="list-style-type: none"> 1. Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen. 2. After pressing the waypoint or destination, press [Change Order].  <ol style="list-style-type: none"> 3. Change the order by pressing and dragging up/down the waypoint or destination.  <ol style="list-style-type: none"> 4. Press [Recalculate]. 5. Select desired route conditions.

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Claim	Claim Element	Evidence of Infringement
		Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.59, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000161) (yellow annotations added).
1[d]	a route guidance unit configured to carry out route guidance according to the whole route which is searched for by said route searching unit;	<p>Hyundai's navigation device comprises a route guidance unit configured to carry out route guidance according to the whole route which is searched for by said route searching unit.</p> <p>For example, Hyundai's navigation device has a route guidance unit to carry out route guidance directing the vehicle to the destination(s) according to the whole route searched for by the route searching unit discussed above.</p> <p>See, e.g., Gen5W:</p> 

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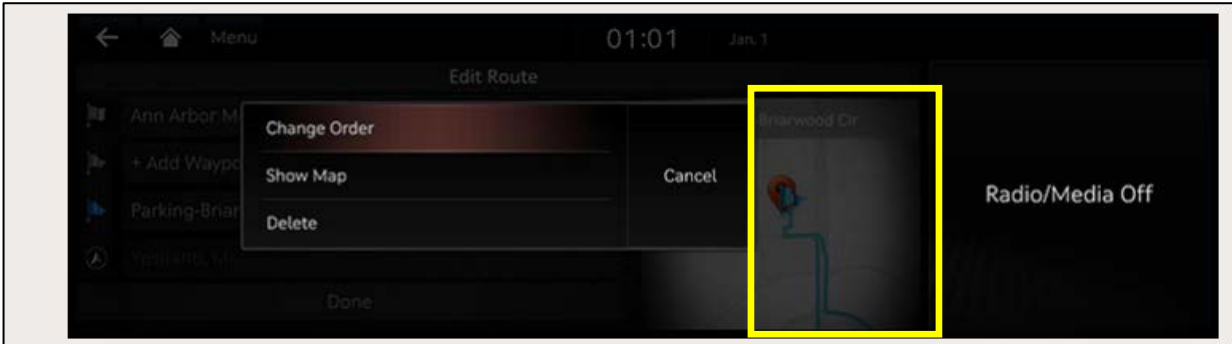
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Claim	Claim Element	Evidence of Infringement
		<p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001331).</p> <p><i>See also:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001334).</p> <p><i>See, e.g., Gen6:</i></p>

Claim	Claim Element	Evidence of Infringement
		<p>SETTING ROUTES FOR NAVIGATION</p> <p>ROUTE DISPLAY</p> <p>After setting a destination, press [Menu] > [Route] on the map screen.</p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.56, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000158).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>ROUTE OVERVIEW</p> <p>Checks or edits the rout overview to the set destination,</p> <p>1. Press [Menu] > [Route] > [Route Overview] on the map screen. Or press [Navigation Menu] > [Route] > [Route Overview] on the home screen.</p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.60, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000162).</p> <p><i>See also:</i></p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.59, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-</p>

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Claim	Claim Element	Evidence of Infringement
		Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000161) (yellow annotations added).
1[e]	an output unit configured to output a message showing that a vehicle has deviated from a route leading to a first next waypoint toward which the vehicle has been heading when said route guidance unit determines that the vehicle has deviated from the route to a predetermined distance or more and is traveling along a route after said first next waypoint; and	<p>Hyundai's navigation device comprises an output unit configured to output a message showing that a vehicle has deviated from a route leading to a first next waypoint toward which the vehicle has been heading when said route guidance unit determines that the vehicle has deviated from the route to a predetermined distance or more and is traveling along a route after said first next waypoint.</p> <p>For example, Hyundai's navigation device has an output unit, <i>e.g.</i>, a display screen, to output a message, <i>e.g.</i>, a "Current waypoint was passed. Skip this waypoint?" message, when the route guidance unit discussed above determines that the vehicle has deviated from a route leading to the next waypoint that the vehicle was headed towards. On information and belief, the route guidance unit discussed above determines that the vehicle has deviated from a route by at least a predetermined distance and is traveling along a route to the next waypoint/destination using Hyundai AutoEver and/or HERE data and/or software.</p> <p><i>See, e.g.</i>, Gen5W:</p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="636 867 1906 899">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001333) (yellow line added).</p> <p data-bbox="636 938 751 971"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p><i>See also:</i></p> <p>Hyundai AutoEver is the official navigation system provider for Hyundai and Kia Motors. Hyundai AutoEver Website at https://www.mapnsoft.com/.</p> <p><i>See also:</i></p> <p>CONTRACTOR (MANUFACTURER/ SUPPLIER) NAME: Hyundai Autoever, CORP.</p> <p>...</p>

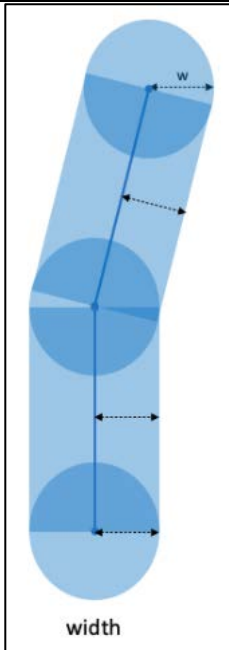
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Claim	Claim Element	Evidence of Infringement
		<p>End-User Terms Required by HERE. The Product utilizes map data that COMPANY licenses from HERE and the following copyright notices apply to such map data (the "HERE Data"): © 2021 HERE. All rights reserved.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-34, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000584) (yellow annotations added).</p> <p><i>See also:</i></p> <div> <div>Listener Name</div> <div>Purpose</div> <div>...</div> <div> <div>RerouteListener</div> <div>Whether a route recalculation has begun as a result of the current position deviating from the original route</div> <div>...</div> <div> <p>Rerouting</p> <p>While navigation is in progress, the following three types of rerouting can occur:</p> <ul style="list-style-type: none"> Basic Route Recalculation - This is performed automatically by the guidance engine. The guidance engine checks the current position to see if it is on the route and approaching the target destination. If it is not, then it triggers a route recalculation and updates the navigation session. <code>RerouteListener.onRerouteBegin()</code> and <code>RerouteListener.onRerouteEnd(RouteResult, RoutingError)</code> callbacks also occur. </div> </div> <p>Navigation Events, HERE Developer, at https://developer.here.com/documentation/android-premium/dev_guide/topics/map-guidance-events.html (MEL_HYUN_TECH_00001342).</p> <p><i>See also:</i></p> </div>

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Claim	Claim Element	Evidence of Infringement
		 <p>The diagram shows a blue line representing a route passing through four blue circular waypoints. A light blue shaded buffer zone surrounds the route. A horizontal double-headed arrow at the top right of the buffer is labeled 'w', and a horizontal double-headed arrow at the bottom is labeled 'width'.</p> <p>Implementing Search Along The Route, HERE Developer, at https://developer.here.com/documentation/geocoding-search-api/dev_guide/topics/implementing-route.html (MEL_HYUN_TECH_00001347).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
1[f]	an input unit configured to input a command indicating whether or not to travel via said first next waypoint in response to the message outputted by said output unit.	<p>Hyundai's navigation device comprises an input unit configured to input a command indicating whether or not to travel via said first next waypoint in response to the message outputted by said output unit.</p> <p>For example, Hyundai's navigation device has an input unit, <i>e.g.</i>, touchscreen and/or button configured to input a command indicating whether or not to travel to the next waypoint/final destination discussed above, including to skip the next waypoint by pressing the "Yes" button, in response to the message outputted by the output unit discussed above.</p>

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Claim	Claim Element	Evidence of Infringement
	message outputted by said output unit.	<p data-bbox="632 207 863 240"><i>See, e.g., Gen5W:</i></p>  <p data-bbox="632 938 1902 1008">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p data-bbox="632 1049 747 1081"><i>See also:</i></p>

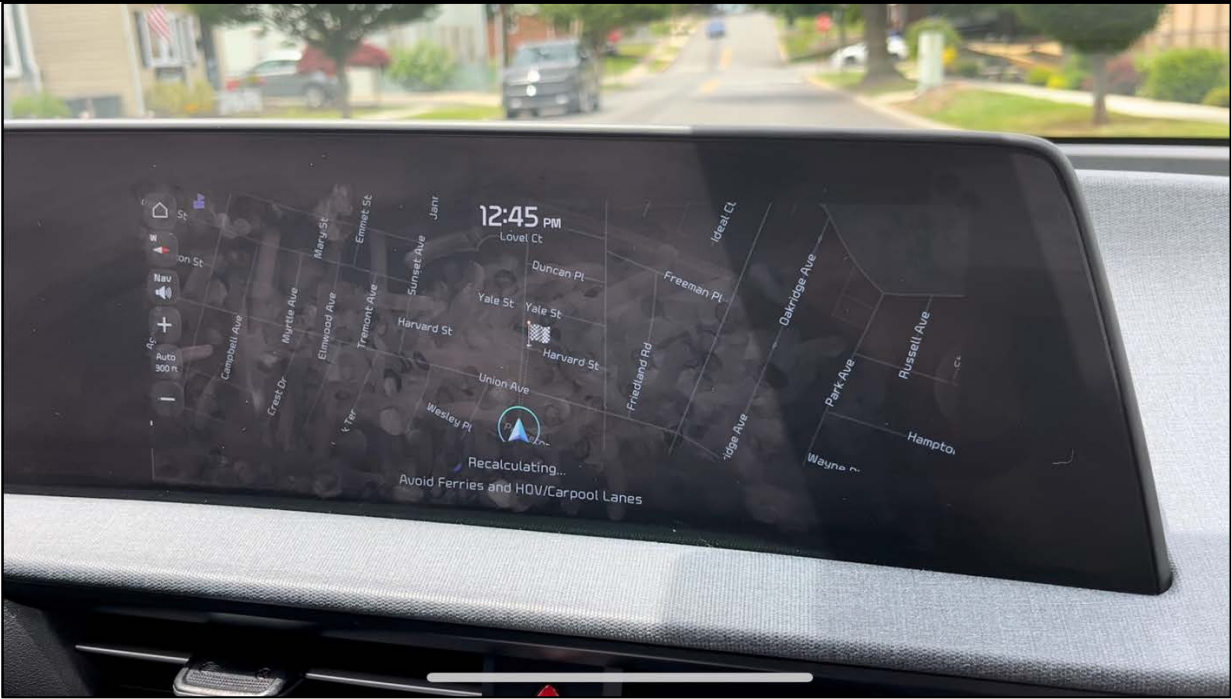
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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 873 1902 938">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p data-bbox="632 979 747 1008"><i>See also:</i></p>

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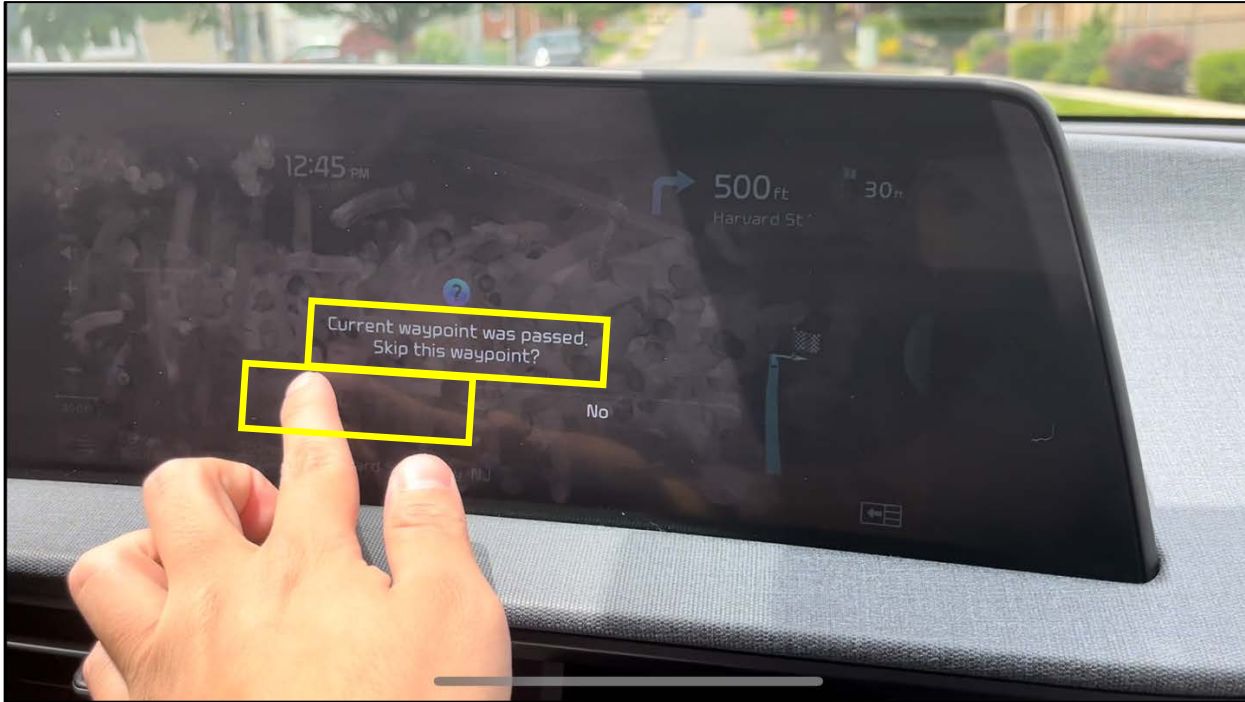
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Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336).</p> <p><i>See also:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
2	The navigation device according to claim 1, wherein when the command is inputted from the input unit, the output unit deletes the message which	<p>See claim 1.</p> <p>In Hyundai's navigation device according to claim 1, when the command is inputted from the input unit, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route.</p> <p>For example, when the command is inputted from the input unit discussed above (<i>see element 1[f] above</i>), <i>e.g.</i>, the command to skip a waypoint, the output unit discussed above (<i>see element 1[e]</i></p>

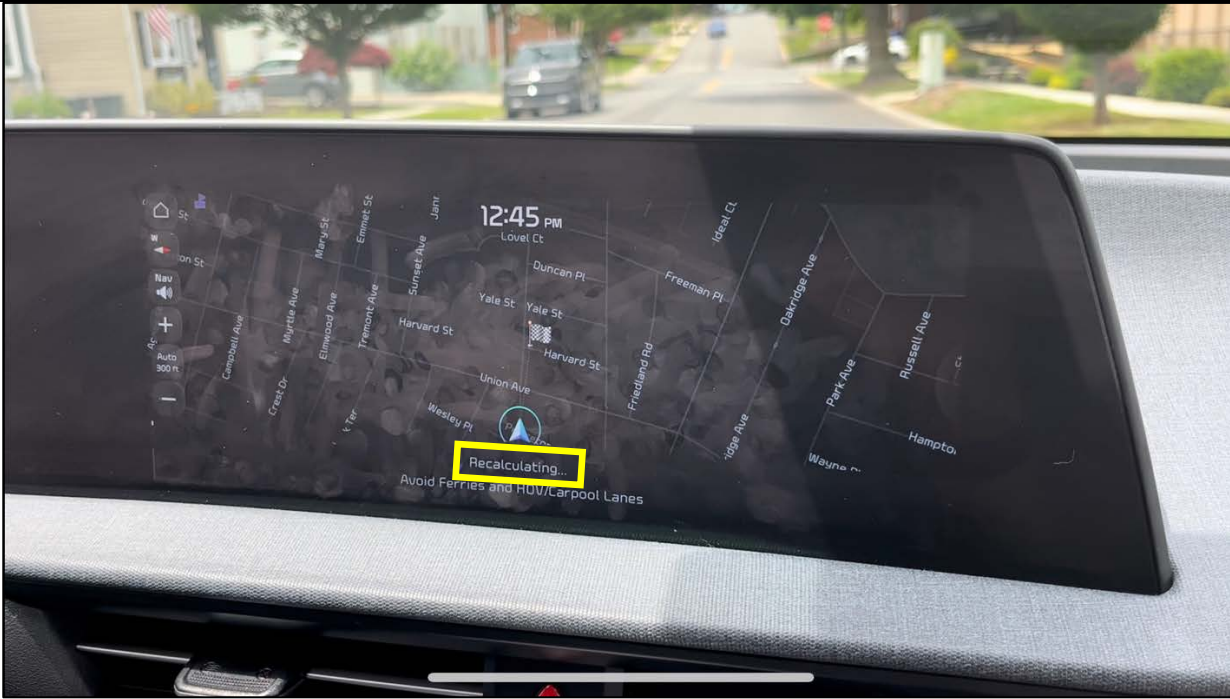
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Claim	Claim Element	Evidence of Infringement
	said output unit outputs and the route searching unit re-searches for a new whole route.	<p>above) deletes the “Current waypoint was passed. Skip this waypoint?” message and the route searching unit discussed above (<i>see</i> element 1[c] above) re-searches for a new whole route.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 867 1902 938">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336) (yellow annotations added).</p> <p data-bbox="632 976 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
3	The navigation device according to claim 1, wherein when the command indicating that the vehicle does not travel via the first next waypoint is	<p>See claim 1.</p> <p>In Hyundai's navigation device according to claim 1, when the command indicating that the vehicle does not travel via the first next waypoint is inputted, the output unit outputs a waypoint list in which a list of the waypoints set by the setting unit is shown, and the route searching unit re-searches for a new whole route according to a new waypoint list which is acquired by changing the waypoint list outputted by said output unit by using said input unit.</p>

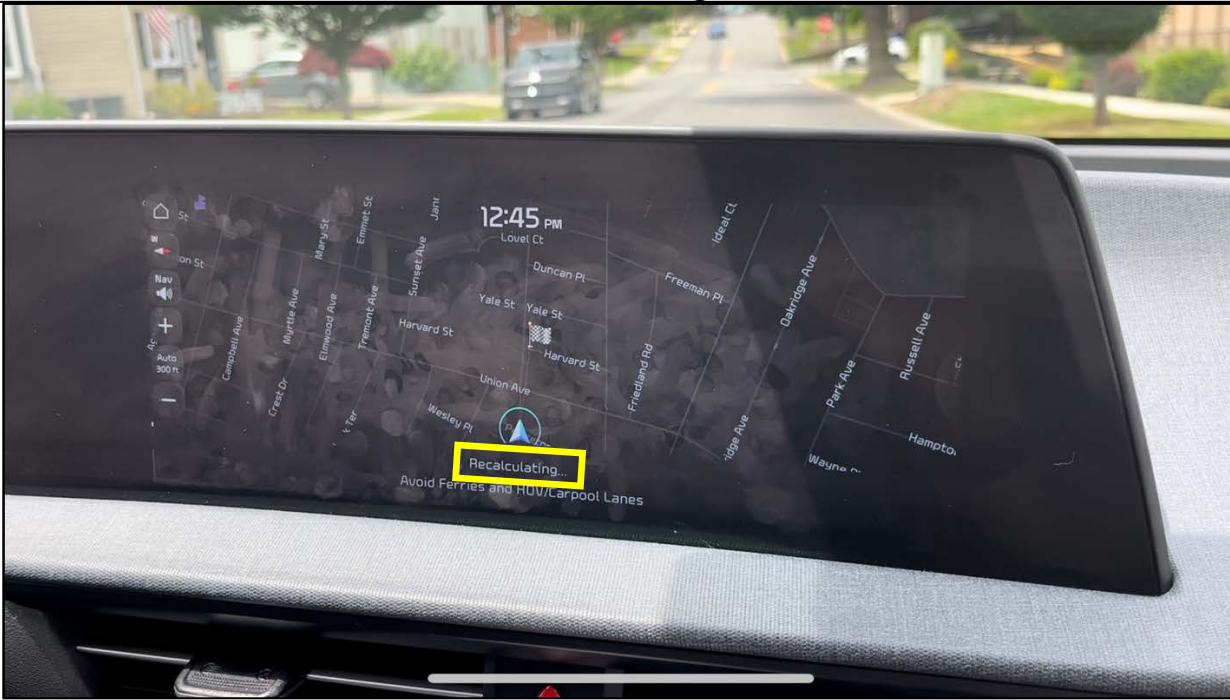
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Claim	Claim Element	Evidence of Infringement
	inputted, the output unit outputs a waypoint list in which a list of the waypoints set by the setting unit is shown, and the route searching unit re-searches for a new whole route according to a new waypoint list which is acquired by changing the waypoint list outputted by said output unit by using said input unit.	<p>For example, when the command indicating that the vehicle is not traveling to the next waypoint is inputted using the input unit discussed above (<i>see</i> element 1[f] above), Hyundai's navigation device outputs via its output unit discussed above a list of waypoints set by the setting unit discussed above and re-searches for a new whole route without the deleted next waypoint via its route searching unit discussed above according to the new waypoint list.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p><i>See also:</i></p>

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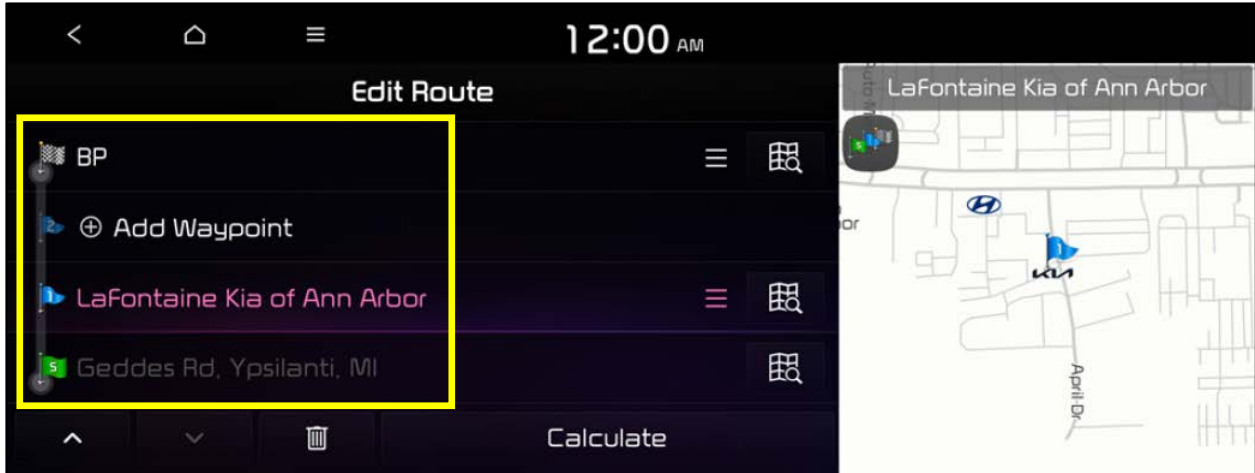
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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 867 1902 935">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336) (yellow annotations added).</p> <p data-bbox="632 976 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p><i>See also:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-17, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000567).</p> <p>See also:</p>  <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-18, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000568) (yellow annotations added).</p>

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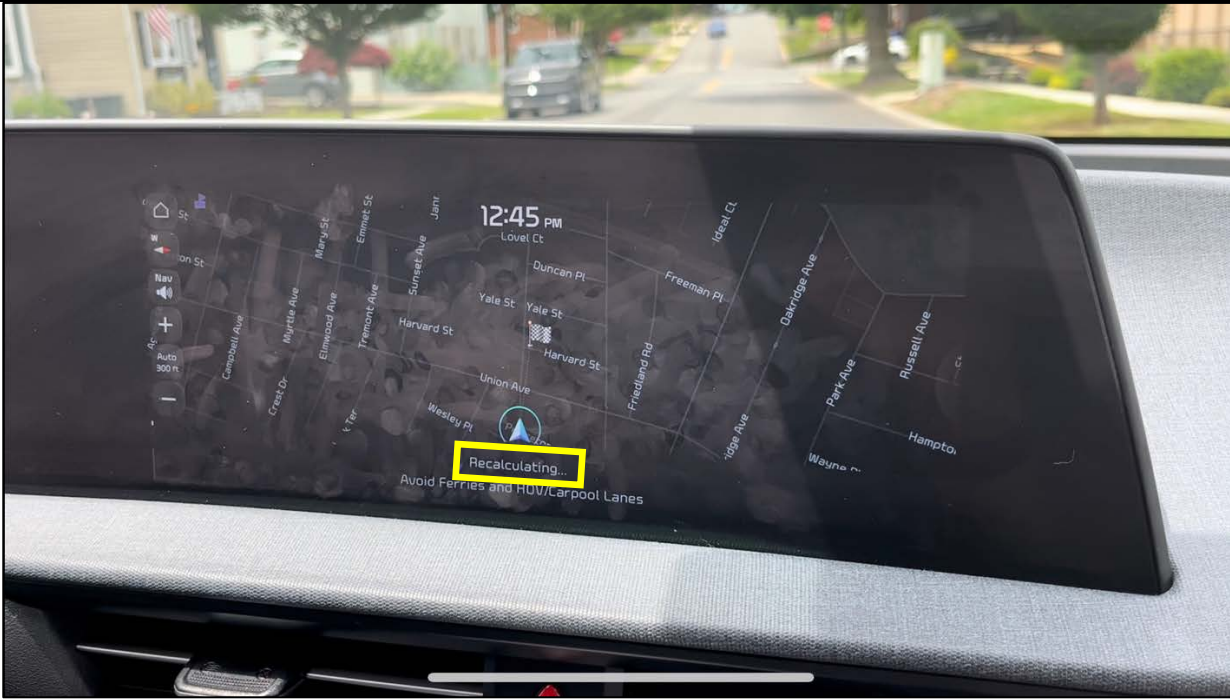
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Claim	Claim Element	Evidence of Infringement
		On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i>
4	The navigation device according to claim 1, wherein when the command indicating that the vehicle does not travel via the first next waypoint is inputted, the route searching unit re-searches for a new whole route leading to the destination via another waypoint when the other waypoint exists forward of the first next waypoint, or re-searches for a new whole route leading to the destination when no other waypoint exists forward of the first next waypoint.	<p><i>See claim 1.</i></p> <p>In Hyundai's navigation device according to claim 1, when the command indicating that the vehicle does not travel via the first next waypoint is inputted, the route searching unit re-searches for a new whole route leading to the destination via another waypoint when the other waypoint exists forward of the first next waypoint, or re-searches for a new whole route leading to the destination when no other waypoint exists forward of the first next waypoint.</p> <p>For example, when the command indicating that the vehicle is not traveling to the next waypoint is inputted using the input unit discussed above (<i>see element 1[f] above</i>), Hyundai's navigation device re-calculates a new whole route to the destination discussed above via its route searching unit discussed above including when no other waypoint exists in front of the next waypoint.</p> <p><i>See, e.g., Gen5W:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 873 1904 943">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p data-bbox="632 980 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 867 1902 935">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336) (yellow annotations added).</p> <p data-bbox="632 976 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 868 1650 901">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p data-bbox="632 941 1894 1015">On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
7	The navigation device according to claim 1, wherein when the command indicating that the vehicle travels via the first next waypoint is	<p data-bbox="632 1055 787 1088"><i>See claim 1.</i></p> <p data-bbox="632 1128 1906 1234">In Hyundai's navigation device according to claim 1, when the command indicating that the vehicle travels via the first next waypoint is inputted, the route searching unit re-searches for a new whole route leading to the destination via said first next waypoint.</p> <p data-bbox="632 1274 1860 1339">For example, when the command indicating that the vehicle travels via the first next waypoint is inputted, <i>e.g.</i>, when the "No" button is pressed in response to the "Current waypoint was passed.</p>

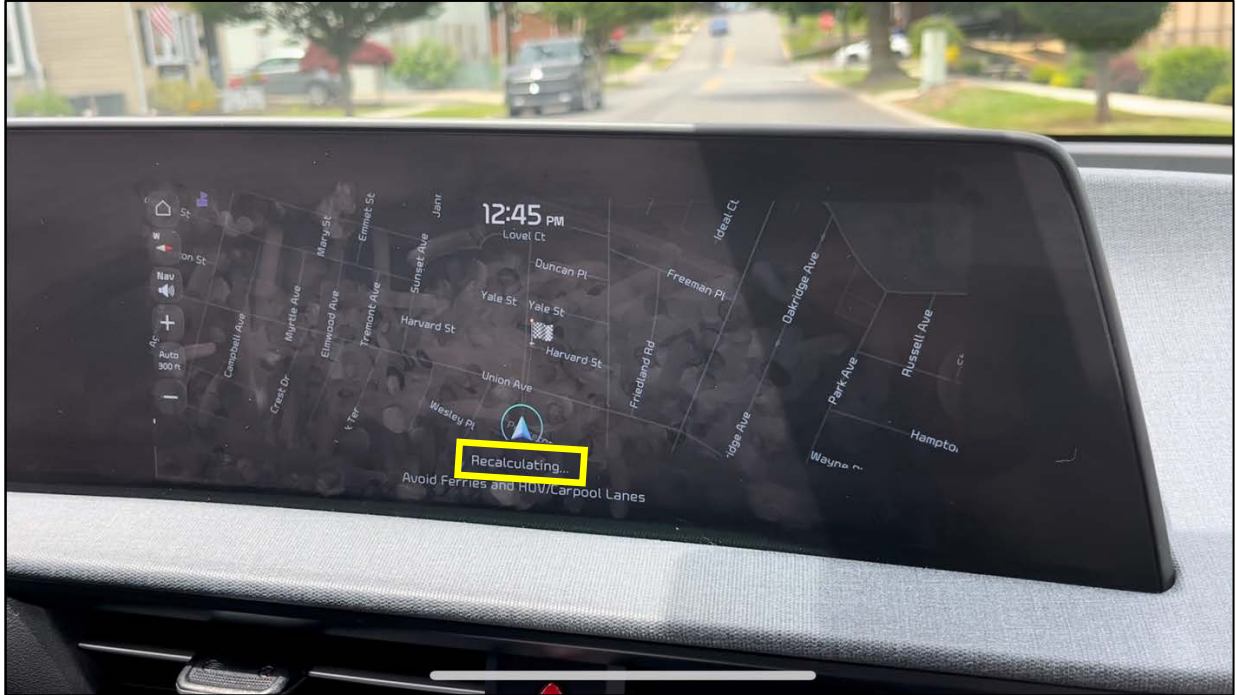
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Claim	Claim Element	Evidence of Infringement
	inputted, the route searching unit re-searches for a new whole route leading to the destination via said first next waypoint.	<p>Skip this waypoint?" message, the route searching unit re-searches for a new whole route leading to the destination via said first next waypoint.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p><i>See also:</i></p>

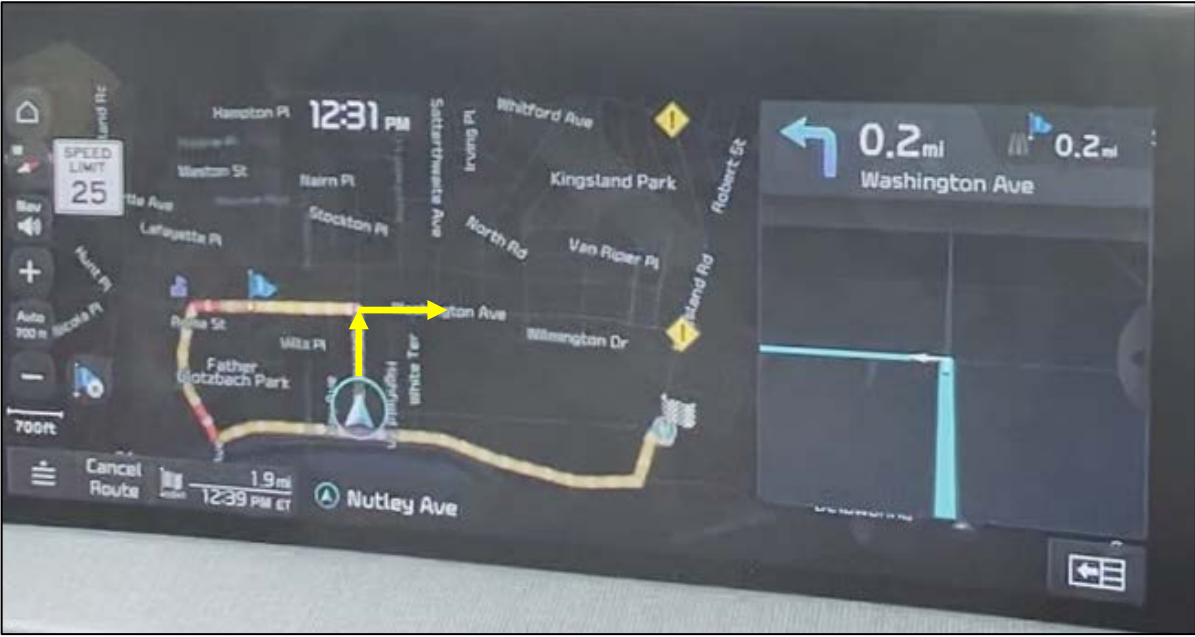
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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336) (yellow annotations added).</p> <p><i>See also, e.g.,</i> re-searching for a new whole route leading to the destination via said first next waypoint:</p>

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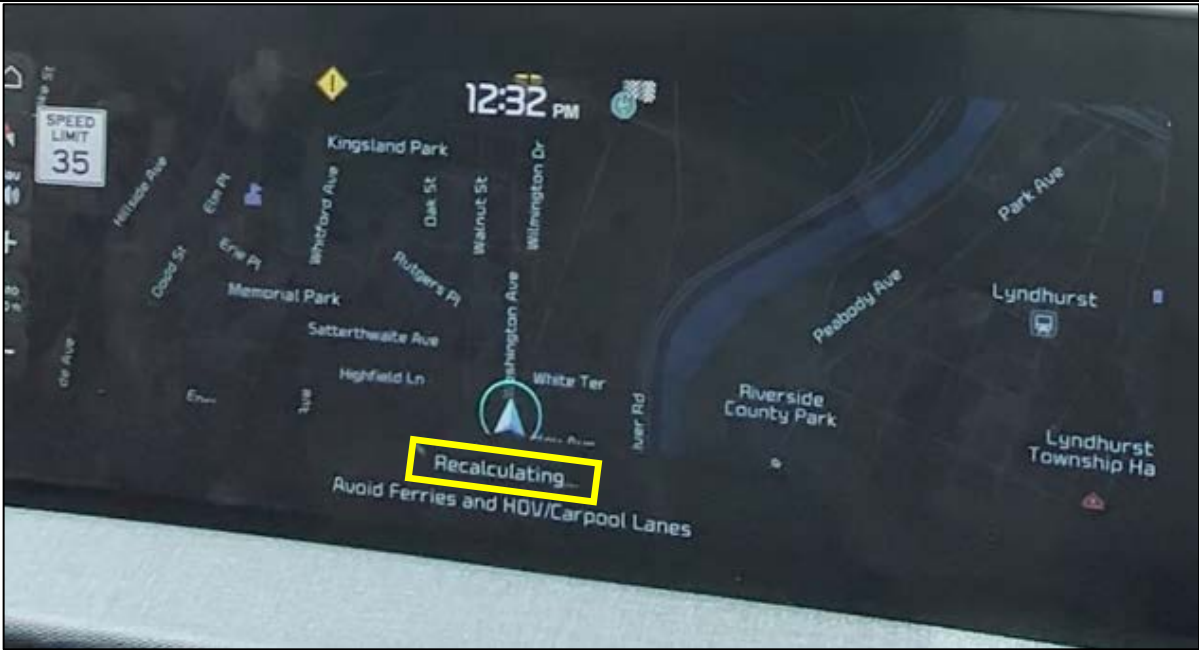
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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001338) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001339).</p> <p><i>See also:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001341) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001340).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
8	The navigation device according to claim 1, wherein the output unit includes a display unit, and the input unit inputs the command according to either pushing down of a	<p>See claim 1.</p> <p>In Hyundai's navigation device according to claim 1, the output unit includes a display unit, and the input unit inputs the command according to either pushing down of a button displayed on a screen of said display unit, or voice.</p> <p>For example, the output unit discussed above of Hyundai's navigation device includes a display unit, <i>e.g.</i>, a display screen. For example, the input unit discussed above of Hyundai's navigation device inputs the command (<i>see element 1[f] above</i>) by pressing and/or pushing down a button displayed on the display unit's screen.</p>

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Claim	Claim Element	Evidence of Infringement
	button displayed on a screen of said display unit, or voice.	<p>See, e.g., Gen5W:</p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p>See also:</p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
9	The navigation device according to claim 1, wherein when the command is not inputted from the input unit even if a predetermined	<p><i>See claim 1.</i></p> <p>In Hyundai's navigation device according to claim 1, when the command is not inputted from the input unit even if a predetermined period of time has elapsed after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route.</p>

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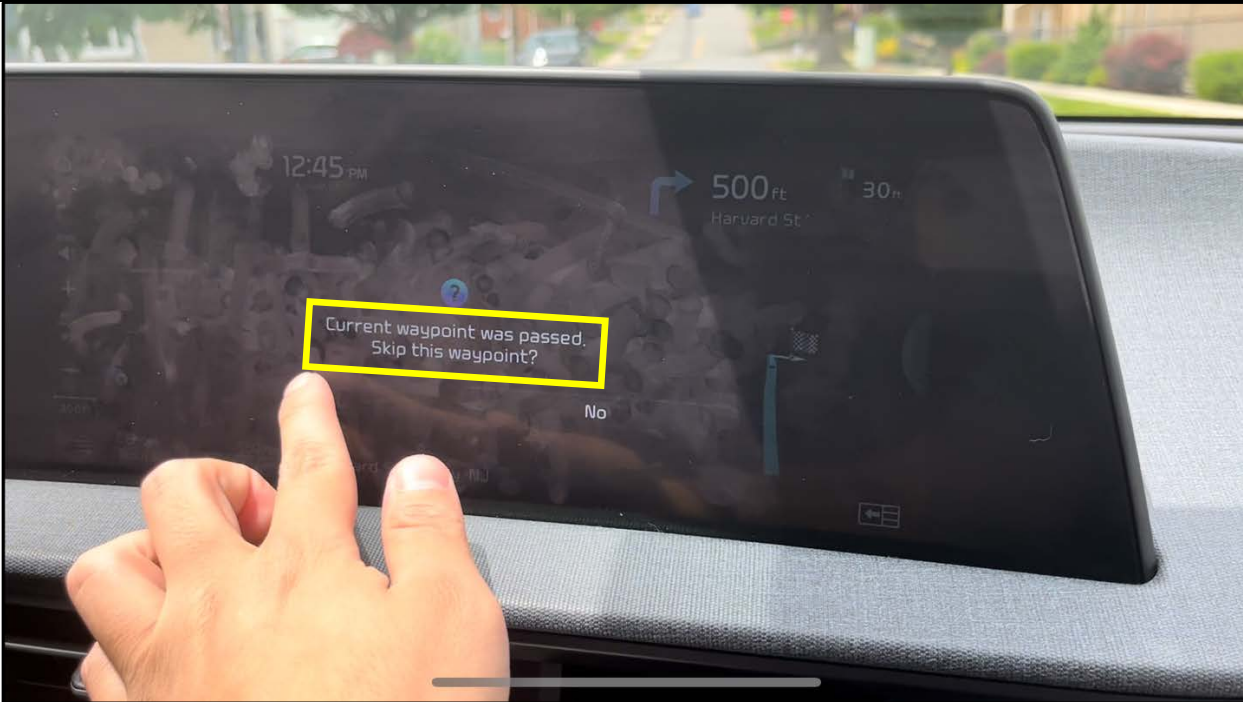
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Claim	Claim Element	Evidence of Infringement
	<p>period of time has elapsed after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route.</p>	<p>For example, on information and belief, when the command is not inputted from the input unit discussed above, <i>e.g.</i>, when the “Yes or “No” button is not pressed in response to the “Current waypoint was passed. Skip this waypoint?” message, even if a predetermined period of time has elapsed after the output unit discussed above outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message and the route searching unit discussed above re-searches for a new whole route.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332).</p> <p>The message shown above is deleted from the screen if no buttons are pressed after a period of time.</p>

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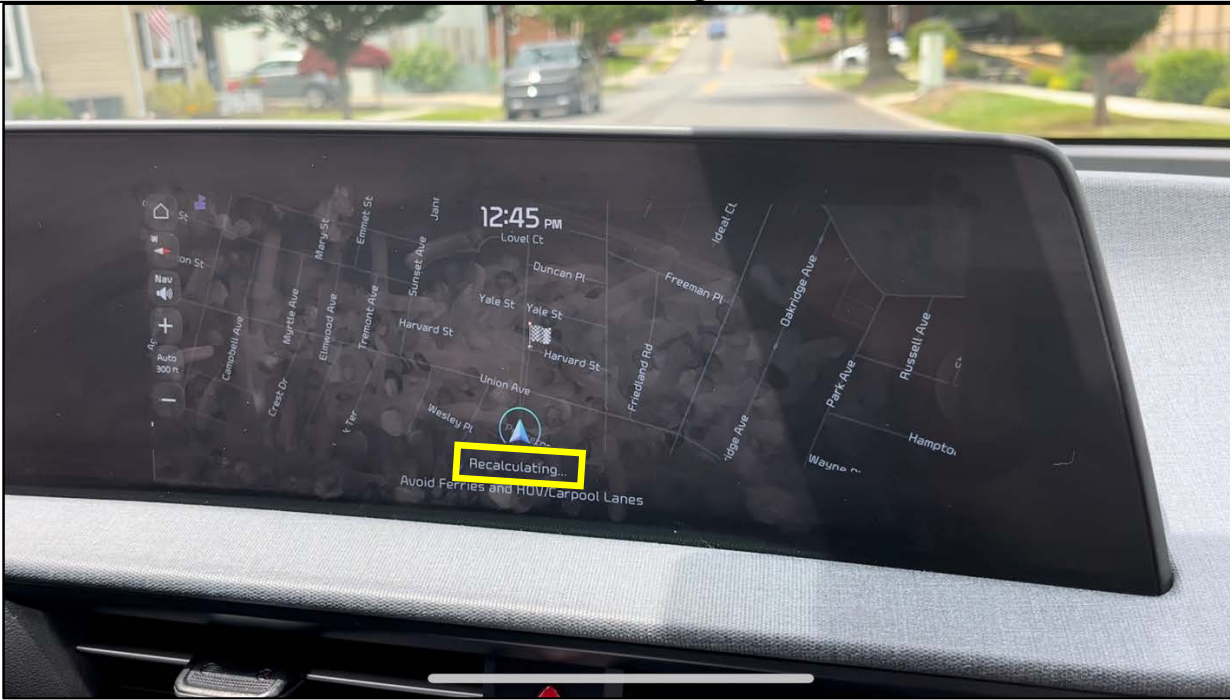
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Claim	Claim Element	Evidence of Infringement
		On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See</i> Gen5W <i>above</i> .
10	The navigation device according to claim 1, wherein when the route guidance unit determines that the vehicle has deviated from the route to the predetermined distance or more in a state in which the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route.	<p><i>See</i> claim 1.</p> <p>In Hyundai's navigation device according to claim 1, when the route guidance unit determines that the vehicle has deviated from the route to the predetermined distance or more in a state in which the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route.</p> <p>For example, when the route guidance unit discussed above determines that the vehicle has deviated from the route to the predetermined distance or more (<i>see</i> element 1[e] <i>above</i>), Hyundai's navigation device enters a state in which the output unit discussed above outputs a "Current waypoint was passed. Skip this waypoint?" message showing that the vehicle has deviated from the route and then deletes the message when the route searching unit discussed above searches for and obtains a new whole route.</p> <p><i>See, e.g.,</i> Gen5W:</p>

Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 873 1906 943">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p data-bbox="632 980 747 1010"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 867 1902 935">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001341) (yellow annotations added).</p> <p data-bbox="632 976 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
11	The navigation device according to claim 9, wherein the route searching unit re-searches for a new whole route leading to the	<p>See claim 9.</p> <p>In Hyundai's navigation device according to claim 9, the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint.</p> <p>For example, on information and belief, the route searching unit of Hyundai's navigation system re-searches for a new whole route leading to the destination via the first next waypoint.</p>

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Claim	Claim Element	Evidence of Infringement
	destination via the first next waypoint.	<p>See, e.g., Gen5W:</p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. See Gen5W above.</p>
12	The navigation device according to claim 10, wherein the route searching unit re-searches for a new whole route leading to the	<p>See claim 10.</p> <p>In Hyundai's navigation device according to claim 10, the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint.</p>

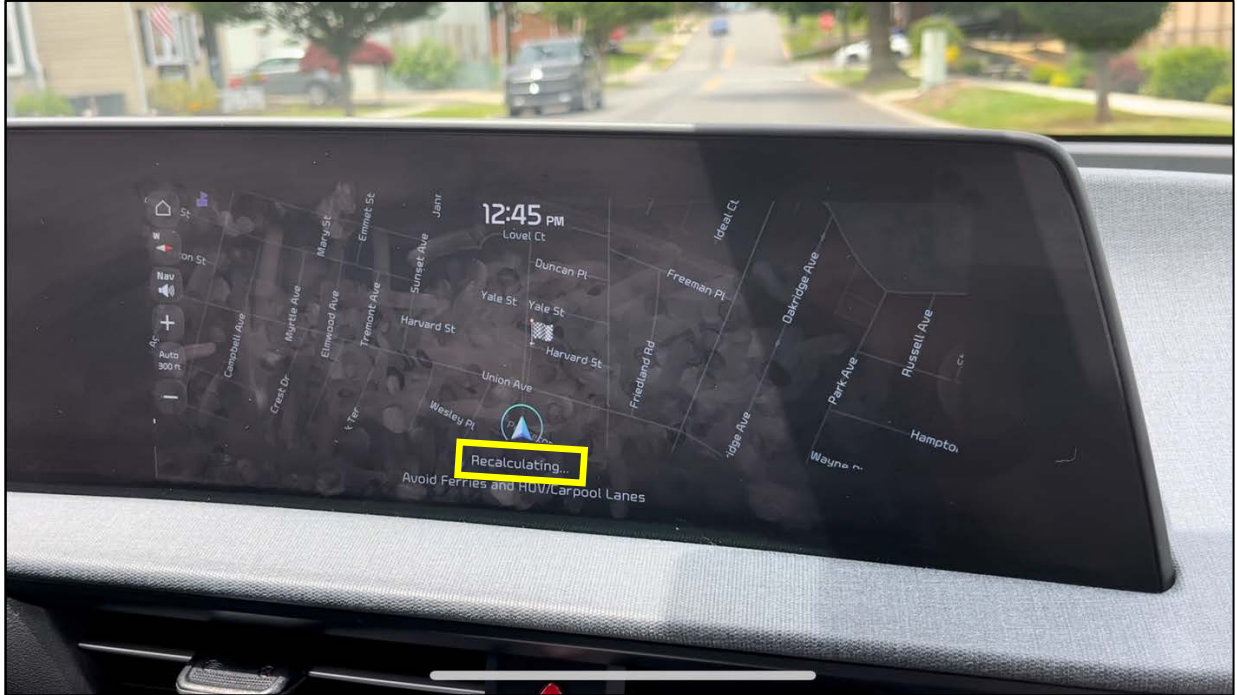
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Claim	Claim Element	Evidence of Infringement
	destination via the first next waypoint.	<p>For example, the route searching unit discussed above of Hyundai's navigation device re-searches for a new whole route leading to the destination discussed above via the first next waypoint discussed above.</p> <p>See, e.g., Gen5W:</p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p>See also:</p>

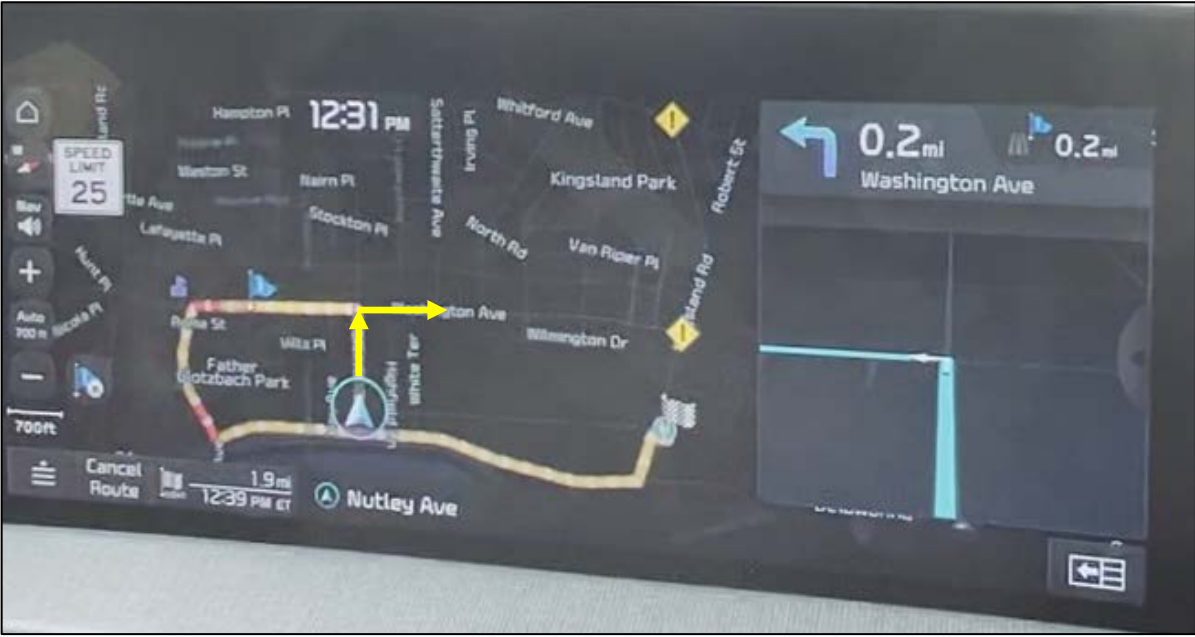
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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001341) (yellow annotations added).</p> <p><i>See also, e.g.,</i> re-searching for a new whole route leading to the destination via said first next waypoint:</p>

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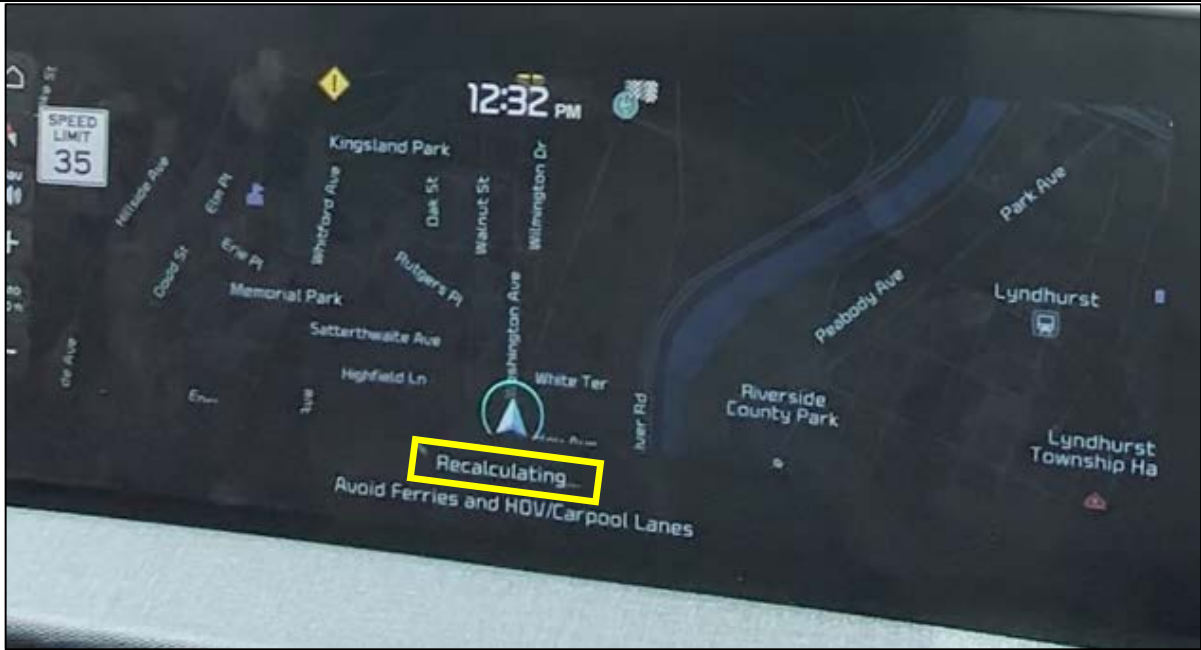
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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 803 1902 873">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001338) (yellow annotations added).</p> <p data-bbox="632 911 747 943"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001339).</p> <p><i>See also:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001341) (yellow annotations added).</p> <p><i>See also:</i></p>

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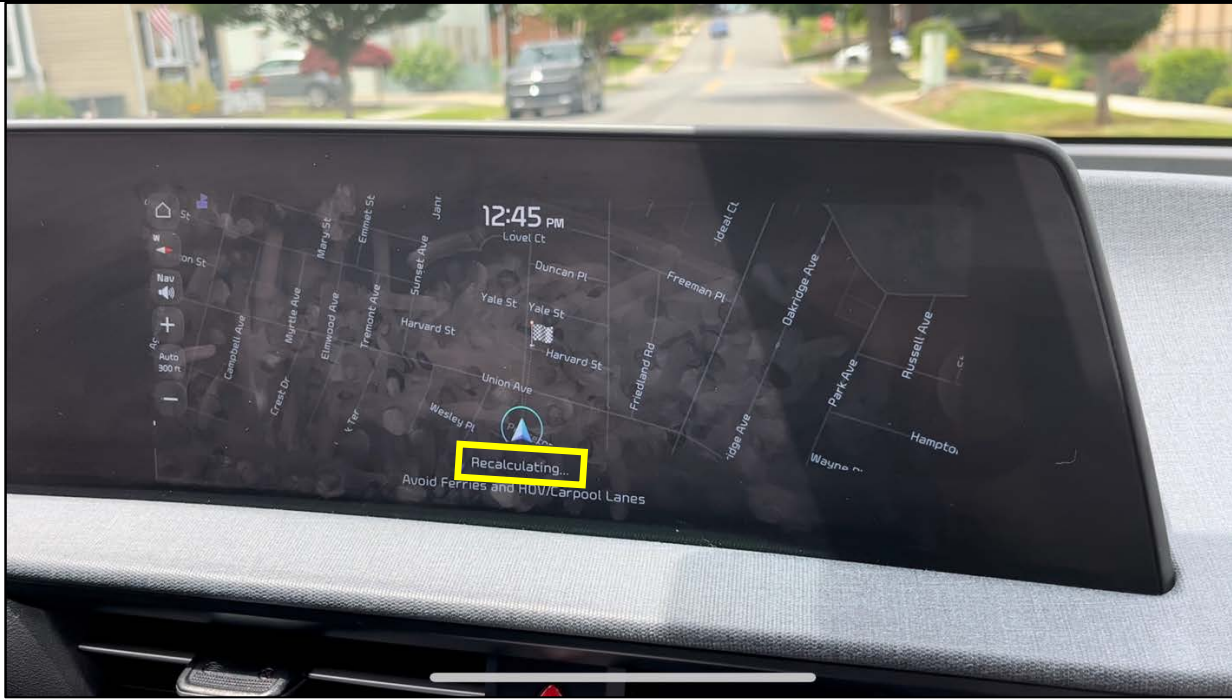
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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001340).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
14	The navigation device according to claim 10, wherein the route searching unit re-searches for a new whole route leading to the destination via another waypoint when the other	<p><i>See claim 10.</i></p> <p>In Hyundai's navigation device according to claim 10, the route searching unit re-searches for a new whole route leading to the destination via another waypoint when the other waypoint exists forward of the first next waypoint, or re-searches for a new whole route leading to the destination when no other waypoint exists forward of the first next waypoint.</p> <p>For example, the route searching unit discussed above of Hyundai's navigation device re-searches for a new whole route leading to the destination discussed above including when no other waypoints exist.</p>

Claim	Claim Element	Evidence of Infringement
	<p>waypoint exists forward of the first next waypoint, or re-searches for a new whole route leading to the destination when no other waypoint exists forward of the first next waypoint.</p>	<p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 867 1902 935">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001341) (yellow annotations added).</p> <p data-bbox="632 976 747 1008"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
16	The navigation device according to claim 1, wherein when the command is not inputted from the input unit even if a predetermined period of time has	<p><i>See claim 1.</i></p> <p>In Hyundai's navigation device according to claim 1, when the command is not inputted from the input unit even if a predetermined period of time has elapsed after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint, a new whole route leading to the destination via another waypoint when the other waypoint exists forward of said first next waypoint, or a new</p>

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Claim	Claim Element	Evidence of Infringement
	<p>elapsed after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint, a new whole route leading to the destination via another waypoint when the other waypoint exists forward of said first next waypoint, or a new whole route leading to the destination when no other waypoint exists forward of said first next waypoint.</p>	<p>whole route leading to the destination when no other waypoint exists forward of said first next waypoint.</p> <p>For example, on information and belief, when the command is not inputted from the input unit discussed above, <i>e.g.</i>, when the “Yes or “No” button is not pressed in response to the “Current waypoint was passed. Skip this waypoint?” message, even if a predetermined period of time has elapsed after the output unit discussed above outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message and the route searching unit discussed above re-searches for a new whole route leading to the destination, leading to the destination via the first next waypoint, or leading to the destination via another waypoint.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332).</p>

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Claim	Claim Element	Evidence of Infringement
		On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i>
17	The navigation device according to claim 1, wherein when the command is not inputted from the input unit even if the vehicle travels a fixed distance after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint, a new whole route leading to the destination via another	<p><i>See claim 1.</i></p> <p>In Hyundai's navigation device according to claim 1, when the command is not inputted from the input unit even if the vehicle travels a fixed distance after the output unit outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message which said output unit outputs and the route searching unit re-searches for a new whole route leading to the destination via the first next waypoint, a new whole route leading to the destination via another waypoint when the other waypoint exists forward of said first next waypoint, or a new whole route leading to the destination when no other waypoint exists forward of said first next waypoint.</p> <p>For example, on information and belief, when the command is not inputted from the input unit discussed above, <i>e.g.</i>, when the "Yes or "No" button is not pressed in response to the "Current waypoint was passed. Skip this waypoint?" message, even if the vehicle travels a fixed distance after the output unit discussed above outputs the message showing that the vehicle has deviated from the route, the output unit deletes the message and the route searching unit discussed above re-searches for a new whole route leading to the destination, leading to the destination via the first next waypoint, or leading to the destination via another waypoint.</p> <p><i>See, e.g., Gen5W:</i></p>

Claim	Claim Element	Evidence of Infringement
	waypoint when the other waypoint exists forward of said first next waypoint, or a new whole route leading to the destination when no other waypoint exists forward of said first next waypoint.	 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
19[a]	A navigation method performed by utilizing a navigation apparatus, comprising:	<p>Hyundai or another direct infringer performs a navigation method performed by utilizing a navigation apparatus.</p> <p>For example, Hyundai, KIA, and Genesis (collectively, "Hyundai") vehicles have a navigation device, such as the Standard Gen 5 Wide infotainment system found in the, <i>inter alia</i>, 2022 KIA EV6.</p> <p><i>See, e.g.,</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>...</p>  <p>...</p>  <p>...</p> <div style="border: 1px solid black; padding: 10px;"> <p>Charging network integration connects you with 40,000+ charging stations throughout the US — including 400V DC fast chargers³ and higher — guiding you to the nearest charger along your route via the Navigation⁸ system.</p> </div> <p>2022 KIA EV6 Brochure, at pp. 1, 7 (MEL_HYUN_TECH_00000412, MEL_HYUN_TECH_00000418).</p>

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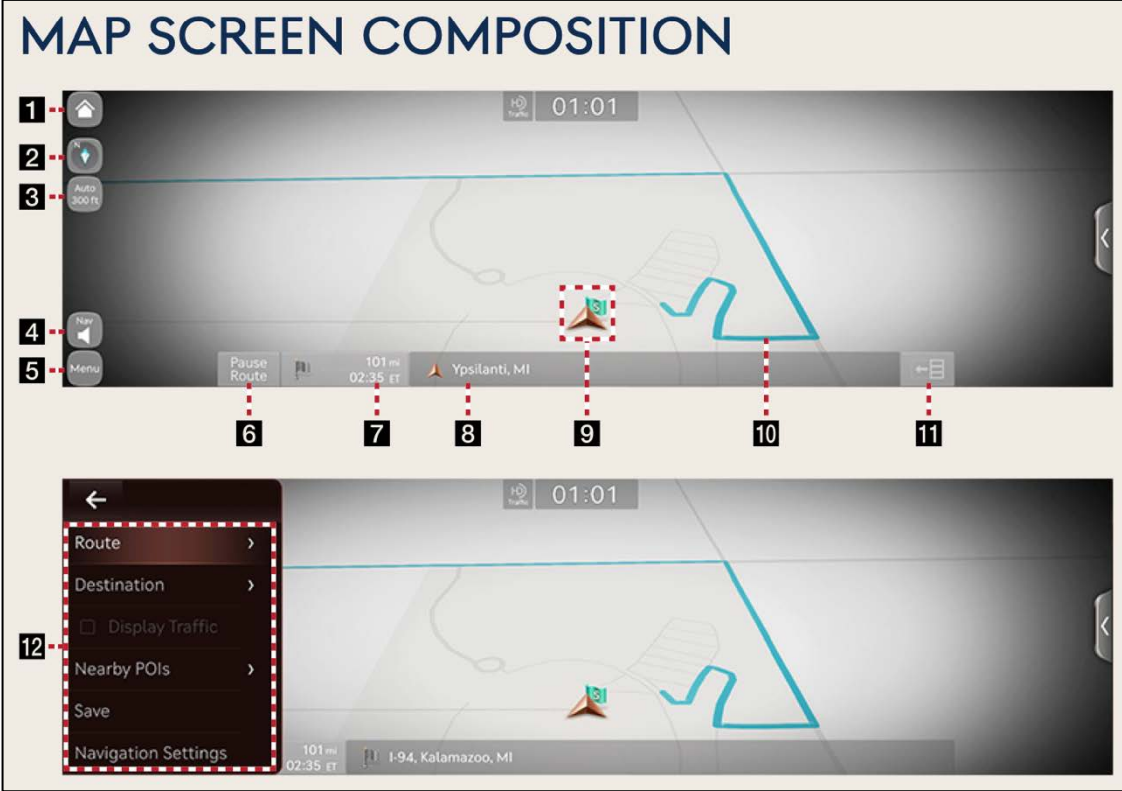
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Claim	Claim Element	Evidence of Infringement
		<p>See also:</p> <div><h3>Navigation Menu overview</h3><p>You can use the navigation system conveniently through various functions on the Navigation Menu screen.</p><p>Perform any of the following methods:</p><ul style="list-style-type: none">On the All Menus screen, press Navigation Menu.On the control panel, press the [NAV] button.</div> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-2, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000552).</p> <p>See also:</p>

Claim	Claim Element	Evidence of Infringement																																							
		<div><h3>Map screen</h3><p>The map screen provides various functions and informations, as follows:</p></div> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-6, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000556).</p> <p>See also:</p> <table><tr><th>Vehicle</th><th>Model</th><th>Navigation System</th><th>SW Version</th><th>MAP Version</th><th>Model Name</th></tr><tr><td rowspan="3">Cadenza</td><td>2017-18 Cadenza</td><td>Standard Gen4 Navigation</td><td>ST.YG.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>YGAS.S4AMN.US</td></tr><tr><td>2019 Cadenza</td><td>Standard Gen5 Navigation</td><td>YG19.USA.SOPV136.230410.STD_H</td><td>NAM.16.41.71.012.302.9</td><td>YGAS.S5AMC.US</td></tr><tr><td>2020 Cadenza</td><td>Standard Gen5W Navigation</td><td>YGPE.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>YGP19S.S5CMC.US</td></tr><tr><td rowspan="2">Carnival</td><td>2022 Carnival</td><td>Standard Gen5W Navigation</td><td>KA4.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>KA4AS.S5BMC.US</td></tr><tr><td>2023 Carnival</td><td>Standard Gen5W Navigation</td><td>KA4_23.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>KA4CS.S5BMC.US</td></tr><tr><td>EV6</td><td>2022-23 EV6</td><td>Standard Gen5W Navigation</td><td>CV_E.USA.S5W_M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>CVAE.S5BMC.US</td></tr></table> <p>KIA Navigation Systems Overview at https://update.kia.com/US/EN/updateNoticePopup/1F1boL (MEL_HYUN_TECH_00000037) (yellow annotations added).</p>	Vehicle	Model	Navigation System	SW Version	MAP Version	Model Name	Cadenza	2017-18 Cadenza	Standard Gen4 Navigation	ST.YG.USA.E542.230419	NAM.16.41.41.712.003.3	YGAS.S4AMN.US	2019 Cadenza	Standard Gen5 Navigation	YG19.USA.SOPV136.230410.STD_H	NAM.16.41.71.012.302.9	YGAS.S5AMC.US	2020 Cadenza	Standard Gen5W Navigation	YGPE.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	YGP19S.S5CMC.US	Carnival	2022 Carnival	Standard Gen5W Navigation	KA4.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	KA4AS.S5BMC.US	2023 Carnival	Standard Gen5W Navigation	KA4_23.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	KA4CS.S5BMC.US	EV6	2022-23 EV6	Standard Gen5W Navigation	CV_E.USA.S5W_M.V010.001.230517	NAM.16.41.71.012.512.0	CVAE.S5BMC.US
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Claim	Claim Element	Evidence of Infringement
		<p>For example, the navigation system of the Standard Gen5W infotainment system is equipped on the exemplary 2022 Kia EV6 as well as at least the 2022/2023 Hyundai Elantra, 2022/2023 Hyundai Elantra Hybrid, 2022/2023 Hyundai Elantra N, 2022/2023 Hyundai Ioniq 5, 2022 Hyundai Ioniq Electric, 2022 Hyundai Ioniq Hybrid, 2022 Hyundai Ioniq Plug-in Hybrid, 2022/2023 Hyundai Kona, 2022/2023 Hyundai Kona Electric, 2022/2023 Hyundai Kona N, 2022/2023 Hyundai Palisade, 2022/2023 Hyundai Santa Cruz, 2022/2023 Hyundai Santa Fe, 2022/2023 Hyundai Santa Fe Hybrid, 2022/2023 Hyundai Santa Fe Plug-in Hybrid, 2022/2023 Hyundai Sonata, 2022/2023 Hyundai Sonata Hybrid, 2022/2023 Hyundai Tucson, 2022/2023 Hyundai Tucson Hybrid, 2022/2023 Hyundai Tucson Plug-in Hybrid, 2022 Veloster N, 2022/2023 Hyundai Venue, 2022/2023 Kia Carnival, 2023 Kia EV6, 2022 Kia Forte 4Door, 2022/2023 Kia K5, 2022 Kia Niro, 2022/2023 Kia Niro Electric, 2023 Kia Niro Hybrid, 2022/2023 Kia Niro Plug-in Hybrid, 2022/2023/2024 Kia Seltos, 2022/2023 Kia Sorento, 2022/2023 Kia Sorento Hybrid, 2022/2023 Kia Sorento Plug-in Hybrid, 2022/2023 Kia Soul, 2022 Kia Soul Electric, 2022/2023 Kia Sportage, 2022/2023 Kia Sportage Hybrid, 2022/2023 Kia Sportage Plug-in Hybrid, 2022/2023 Kia Stingray, 2022/2023 Kia Telluride, and 2022/2023 Genesis G70.</p> <p>See https://update.hyundai.com/US/EN/updateNoticePopup/bapU9Q (MEL_HYUN_TECH_00000035-MEL_HYUN_TECH_00000036); see also https://update.kia.com/US/EN/updateNoticePopup/lF1boL (MEL_HYUN_TECH_00000037-MEL_HYUN_TECH_00000038); see also https://update.genesis.com/US/EN/updateNoticePopup/njAeO8 (MEL_HYUN_TECH_00000039).</p> <p>For example, Hyundai vehicles have a navigation device, such as the Premium 6th Generation (“Gen6”) infotainment system found in the, <i>inter alia</i>, 2021 Genesis G80.</p> <p><i>See, e.g.,</i></p>

Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Navigation – Routing Genesis G80 and GV80 How-To Genesis USA, at 1:00, at https://www.youtube.com/watch?v=aM90psllpM8 (MEL_HYUN_TECH_00001317).</p> <p><i>See also:</i></p> <div><p>Thank you for purchasing this Gen6 Premium Class Navigation.</p><p>This user's manual explains how to use the Gen6 Premium Class Navigation.</p><p>Before using the product, read the contents of this user's manual carefully and use this product safely.</p></div>

Claim	Claim Element	Evidence of Infringement
		<p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p. 2, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000104).</p> <p><i>See also:</i></p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p. 27, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000129).</p>

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Claim	Claim Element	Evidence of Infringement																																																																																																																																																												
		<p>For example, the navigation system of the Gen6 infotainment system is equipped on the exemplary 2021 Genesis G80 as well as at least the 2023 Genesis Electrified G80, 2022/2023 Genesis G80, 2022/2023 Genesis GV70, 2023 Genesis Electrified GV70, and 2022/2023/2024 Genesis GV80.</p> <p><i>See, e.g.,</i></p> <table> <tr> <th>Vehicle</th><th>Model</th><th>Navigation System</th><th>SW Version</th><th>MAP Version</th><th>Model Name</th></tr> <tr> <td>Electrified G80</td><td>2023 Electrified G80</td><td>Premium Gen6 Navigation</td><td>RG3.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>RG3AE.P6CLC.US</td></tr> <tr> <td rowspan="2">G70</td><td>2019-21 G70</td><td>Standard Gen5 Navigation</td><td>IK.USA.SOP.V136.230410.STD_H</td><td>NAM.16.41.71.012.302.9</td><td>IKAS.S5AMC.US</td></tr> <tr> <td>2022-23 G70</td><td>Standard Gen5W Navigation</td><td>IKFL.USA.S5W.M.V010.001.230517</td><td>NAM.16.41.71.012.512.0</td><td>IKFAS.S5BMC.US</td></tr> <tr> <td rowspan="14">G80</td><td>2014-16 G80 (8 in. Touchscreen)</td><td>Standard Gen4 Navigation</td><td>ST.DH.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>DHAS.S4AMC.US</td></tr> <tr> <td>2014 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2015 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH15MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2016 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH16MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2017 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH17MY.USA.SOP.xx.030</td><td>NAM.16.41.41.712.102.3</td><td>DHAS.P2ALC.NA</td></tr> <tr> <td>2017 G80 (8 in. Touchscreen)</td><td>Standard Gen4 Navigation</td><td>ST.DH17.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>DHBS.S4AMC.US</td></tr> <tr> <td>2018 G80 (8 in. Touchscreen)</td><td>Standard Gen4 Navigation</td><td>ST.DHPE.USA.E542.230419</td><td>NAM.16.41.41.712.003.3</td><td>DHCS.S4AMN.US</td></tr> <tr> <td>2018 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DHPE.USA.SOP.xx.017</td><td>NAM.16.41.41.712.102.3</td><td>DHBS.P2ALC.NA</td></tr> <tr> <td>2019 G80 (9.2 in. Touchscreen)</td><td>Premium Gen2 Navigation</td><td>DH18MY.USA.SOP.xx.017</td><td>NAM.16.41.41.712.102.3</td><td>DHCS.P2ALC.NA</td></tr> <tr> <td>2019-20 G80 (8 in. Touchscreen)</td><td>Standard Gen5 Navigation</td><td>DH19.USA.SOP.V136.230410.STD_H</td><td>NAM.16.41.71.012.302.9</td><td>DHAS.S5AMC.US</td></tr> <tr> <td>2020 G80 (9.2 in. Touchscreen)</td><td>Premium Gen5 Navigation</td><td>DH19MY.USA.P5.001.011.230426</td><td>NAM.16.41.71.012.402.0</td><td>DHAS.P5ALC.NA</td></tr> <tr> <td>2021 G80</td><td>Premium Gen6 Navigation</td><td>RG3.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>RG3AS.P6CLC.US</td></tr> <tr> <td>2022 G80</td><td>Premium Gen6 Navigation</td><td>RG3_22.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>RG3BS.P6CLC.US</td></tr> <tr> <td>2023 G80</td><td>Premium Gen6 Navigation</td><td>RG3_22.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>RG3BS.P6CLC.US</td></tr> <tr> <td rowspan="4">G90</td><td>2017-19 G90</td><td>Harman DIS2</td><td>R31.0.013A</td><td>DB_HMCDIS2S_NA_NA_S_0000_E01.0035</td><td>P.AVN3</td></tr> <tr> <td>2020 G90</td><td>Premium Gen5 Navigation</td><td>HI.USA.P5.001.011.230426</td><td>NAM.16.41.71.012.402.0</td><td>HIAS.P5BLC.NA</td></tr> <tr> <td>2021-22 G90</td><td>Premium Gen5 Navigation</td><td>HI.USA.P5.001.011.230426</td><td>NAM.16.41.71.012.402.0</td><td>HIBS.P5BLC.NA</td></tr> <tr> <td>2023 G90</td><td>ccIC Navigation</td><td>RS4.USA.ccIC.001.005.230523</td><td>NAM.16.41.71.012.918.0</td><td>RS4AS.PCBLC.US</td></tr> <tr> <td>GV60</td><td>2023 GV60</td><td>ccIC Navigation</td><td>JW.USA.ccIC.001.005.230523</td><td>NAM.16.41.71.012.918.0</td><td>JWAE.PCBLC.US</td></tr> <tr> <td rowspan="2">GV70</td><td>2022 GV70</td><td>Premium Gen6 Navigation</td><td>JK1.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JK1AS.P6CLC.US</td></tr> <tr> <td>2023 GV70</td><td>Premium Gen6 Navigation</td><td>JK1.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JK1AS.P6CLN.A.US</td></tr> <tr> <td rowspan="4">GV80</td><td>2021 GV80</td><td>Premium Gen6 Navigation</td><td>JX1.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JX1AS.P6CLC.US</td></tr> <tr> <td>2022 GV80</td><td>Premium Gen6 Navigation</td><td>JX1_22.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JX1BS.P6CLC.US</td></tr> <tr> <td>2023 GV80</td><td>Premium Gen6 Navigation</td><td>JX1_22.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JX1BS.P6CLC.US</td></tr> <tr> <td>2024 GV80</td><td>Premium Gen6 Navigation</td><td>JX1_22.USA.P6.001.006.230420</td><td>NAM.16.41.71.012.914.0</td><td>JX1BS.P6CLC.US</td></tr> </table>				Vehicle	Model	Navigation System	SW Version	MAP Version	Model Name	Electrified G80	2023 Electrified G80	Premium Gen6 Navigation	RG3.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3AE.P6CLC.US	G70	2019-21 G70	Standard Gen5 Navigation	IK.USA.SOP.V136.230410.STD_H	NAM.16.41.71.012.302.9	IKAS.S5AMC.US	2022-23 G70	Standard Gen5W Navigation	IKFL.USA.S5W.M.V010.001.230517	NAM.16.41.71.012.512.0	IKFAS.S5BMC.US	G80	2014-16 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DH.USA.E542.230419	NAM.16.41.41.712.003.3	DHAS.S4AMC.US	2014 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA	2015 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH15MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA	2016 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH16MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA	2017 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH17MY.USA.SOP.xx.030	NAM.16.41.41.712.102.3	DHAS.P2ALC.NA	2017 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DH17.USA.E542.230419	NAM.16.41.41.712.003.3	DHBS.S4AMC.US	2018 G80 (8 in. Touchscreen)	Standard Gen4 Navigation	ST.DHPE.USA.E542.230419	NAM.16.41.41.712.003.3	DHCS.S4AMN.US	2018 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DHPE.USA.SOP.xx.017	NAM.16.41.41.712.102.3	DHBS.P2ALC.NA	2019 G80 (9.2 in. Touchscreen)	Premium Gen2 Navigation	DH18MY.USA.SOP.xx.017	NAM.16.41.41.712.102.3	DHCS.P2ALC.NA	2019-20 G80 (8 in. Touchscreen)	Standard Gen5 Navigation	DH19.USA.SOP.V136.230410.STD_H	NAM.16.41.71.012.302.9	DHAS.S5AMC.US	2020 G80 (9.2 in. Touchscreen)	Premium Gen5 Navigation	DH19MY.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	DHAS.P5ALC.NA	2021 G80	Premium Gen6 Navigation	RG3.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3AS.P6CLC.US	2022 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US	2023 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US	G90	2017-19 G90	Harman DIS2	R31.0.013A	DB_HMCDIS2S_NA_NA_S_0000_E01.0035	P.AVN3	2020 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIAS.P5BLC.NA	2021-22 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIBS.P5BLC.NA	2023 G90	ccIC Navigation	RS4.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	RS4AS.PCBLC.US	GV60	2023 GV60	ccIC Navigation	JW.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	JWAE.PCBLC.US	GV70	2022 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLC.US	2023 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLN.A.US	GV80	2021 GV80	Premium Gen6 Navigation	JX1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1AS.P6CLC.US	2022 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US	2023 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US	2024 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US
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	2022 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US																																																																																																																																																									
	2023 G80	Premium Gen6 Navigation	RG3_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	RG3BS.P6CLC.US																																																																																																																																																									
G90	2017-19 G90	Harman DIS2	R31.0.013A	DB_HMCDIS2S_NA_NA_S_0000_E01.0035	P.AVN3																																																																																																																																																									
	2020 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIAS.P5BLC.NA																																																																																																																																																									
	2021-22 G90	Premium Gen5 Navigation	HI.USA.P5.001.011.230426	NAM.16.41.71.012.402.0	HIBS.P5BLC.NA																																																																																																																																																									
	2023 G90	ccIC Navigation	RS4.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	RS4AS.PCBLC.US																																																																																																																																																									
GV60	2023 GV60	ccIC Navigation	JW.USA.ccIC.001.005.230523	NAM.16.41.71.012.918.0	JWAE.PCBLC.US																																																																																																																																																									
GV70	2022 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLC.US																																																																																																																																																									
	2023 GV70	Premium Gen6 Navigation	JK1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JK1AS.P6CLN.A.US																																																																																																																																																									
GV80	2021 GV80	Premium Gen6 Navigation	JX1.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1AS.P6CLC.US																																																																																																																																																									
	2022 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																									
	2023 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																									
	2024 GV80	Premium Gen6 Navigation	JX1_22.USA.P6.001.006.230420	NAM.16.41.71.012.914.0	JX1BS.P6CLC.US																																																																																																																																																									

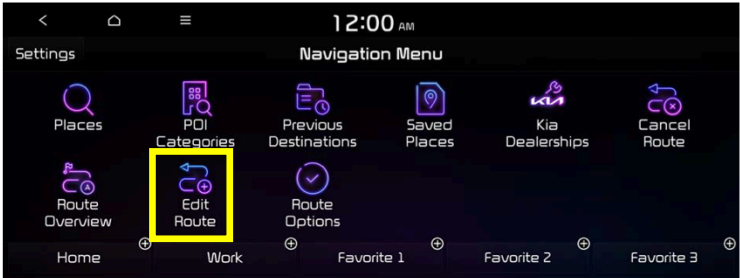
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Claim	Claim Element	Evidence of Infringement
		Genesis Navigation Systems Overview at https://update.genesis.com/US/EN/updateNoticePopup/njAeO8 (MEL_HYUN_TECH_00000039) (yellow annotations added).
19[b]	setting, by utilizing a setting unit of the navigation apparatus, waypoints and a destination;	<p>Hyundai or another direct infringer sets, by utilizing a setting unit of the navigation apparatus, waypoints and a destination.</p> <p>For example, Hyundai's navigation device has a setting unit to set waypoints, <i>e.g.</i>, stops and/or intermediary destinations on the way to the final destination (represented as a blue flag icon in the images below), and a destination, <i>e.g.</i>, a final destination the route is guiding the vehicle to (represented as a checkered flag icon in the images below).</p> <p><i>See, e.g.</i>, Gen5W:</p>

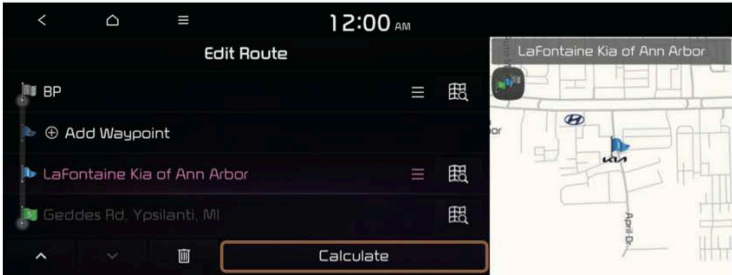
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Claim	Claim Element	Evidence of Infringement
		<p>Editing the route</p> <p>You can edit the waypoints on the way to the destination. You can add up to two waypoints.</p> <p>Setting a waypoint</p> <p>You can search for the desired place and set it as a waypoint.</p> <p>1 On the Navigation Menu screen, press the desired search method to search for a waypoint.</p>  <p>✎ Available icons and their arrangement may differ depending on the vehicle model and specifications.</p> <p>✎ For more information about the waypoint search: ► see "Searching by keyword," "Searching from previous destinations," "Searching for nearby points of interest(POI)," "Searching for restaurants," "Searching for emergency services."</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-17, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000567) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>2 On the map for a search, press Add Waypoint. The selected waypoint is added to the route.</p>  <p>3 After adding waypoints, press Calculate. <p>To access the online user's manual on the Edit Route screen, press  ► User's Manual on Web (QR Code) and then scan the displayed QR code.</p>  </p> <p>4 Select the updated route and then press Start Guidance.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-18, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000568) (yellow annotations added).</p> <p><i>See also:</i></p>

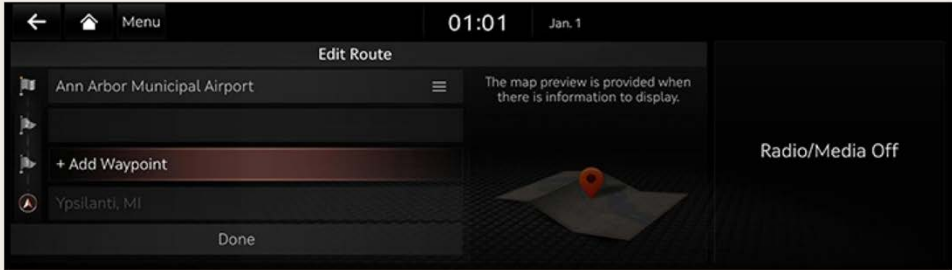
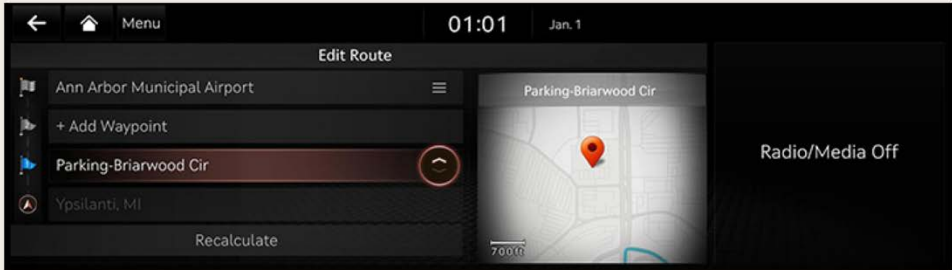
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Claim	Claim Element	Evidence of Infringement
		<p>3 After editing the route, press Reroute.</p> <p>4 Select the updated route and then press Start Guidance.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-19, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000569) (yellow annotations added).</p> <p>See also:</p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001331) (yellow annotations added).</p> <p>See, e.g., Gen6:</p>

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Claim	Claim Element	Evidence of Infringement
		<p>EDIT ROUTE</p> <p>This feature allows you to travel through the searched routes by editing the current route. Waypoints can be added/deleted/edited and the order can be changed.</p> <p>ADDING WAYPOINTS</p> <p>Adds waypoint(s) after setting the destination. Up to 2 waypoints can be added. If 2 waypoints have been added, add a new waypoint after deleting an added waypoint.</p> <ol style="list-style-type: none"> 1. Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen.  <ol style="list-style-type: none"> 2. Press [Add Waypoint]. 3. Set a waypoint by using search menu.  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.58, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000160).</p>

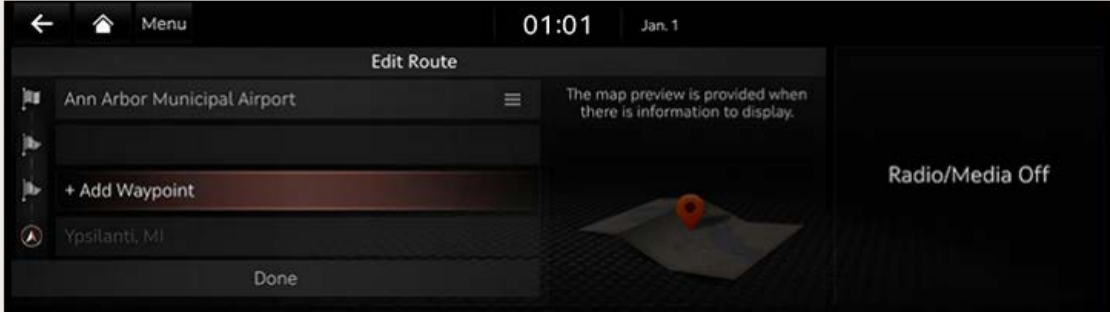
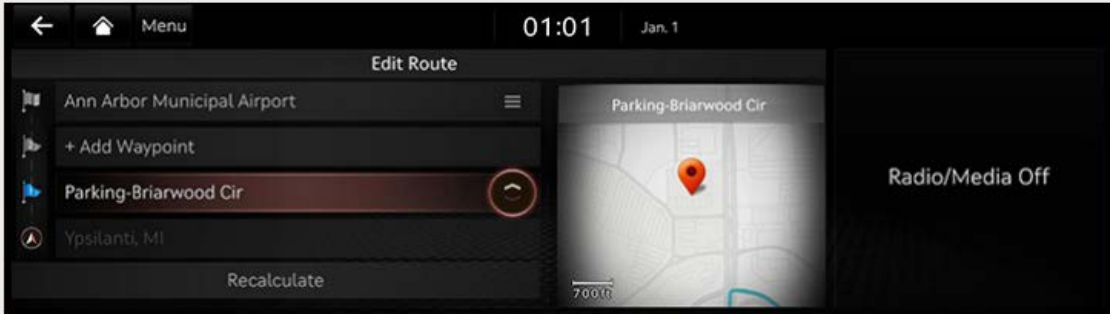
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Claim	Claim Element	Evidence of Infringement
19[c]	searching, by utilizing a route searching unit of the navigation apparatus, for a whole route leading to the destination via the waypoints set by said setting step;	<p>Hyundai or another direct infringer searches, by utilizing a route searching unit of the navigation apparatus, for a whole route leading to the destination via the waypoints set by said setting step.</p> <p>For example, Hyundai's navigation device has a route searching unit that searches for a whole route leading to the destination discussed above (represented as a checkered flag icon in the images below) via the waypoints discussed above (represented as a blue flag icon in the images below) set by the setting unit discussed above.</p> <p><i>See, e.g., Gen5W:</i></p>  <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001331) (yellow annotations added).</p> <p><i>See, e.g., Gen6:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>ADDING WAYPOINTS</p> <p>Adds waypoint(s) after setting the destination. Up to 2 waypoints can be added. If 2 waypoints have been added, add a new waypoint after deleting an added waypoint.</p> <ol style="list-style-type: none"> Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen.  <ol style="list-style-type: none"> Press [Add Waypoint]. Set a waypoint by using search menu.  <ol style="list-style-type: none"> Repeat Step 2 to 3 to add another waypoint. Press [Recalculate]. Select desired route conditions.

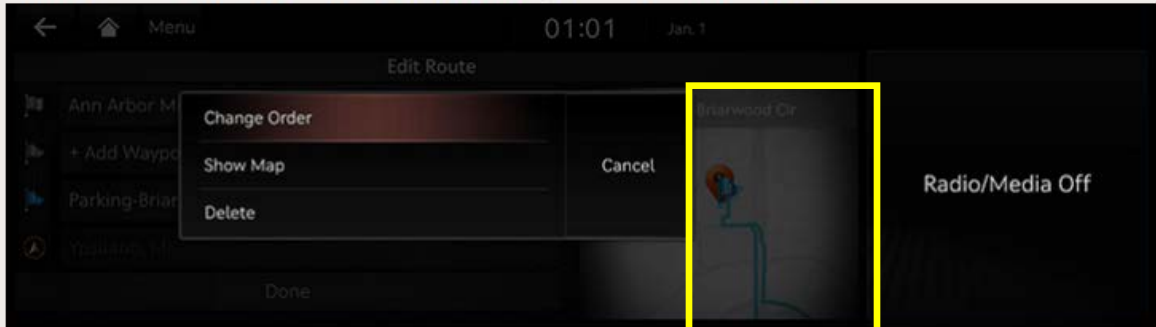
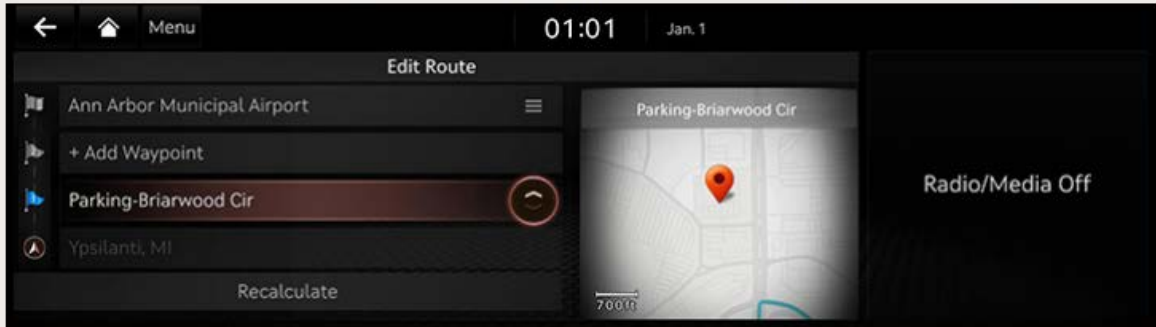
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Claim	Claim Element	Evidence of Infringement
		<p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.58, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000160) (yellow annotations added).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>CHANGING ROUTE ORDER</p> <p>In case of any added waypoint, the route order between the waypoints or between the waypoint(s) and the destination can be changed.</p> <ol style="list-style-type: none"> 1. Press [Menu] > [Route] > [Edit Route] on the map screen. Or press [Navigation Menu] > [Route] > [Edit Route] on the home screen. 2. After pressing the waypoint or destination, press [Change Order].  <ol style="list-style-type: none"> 3. Change the order by pressing and dragging up/down the waypoint or destination.  <ol style="list-style-type: none"> 4. Press [Recalculate]. 5. Select desired route conditions.

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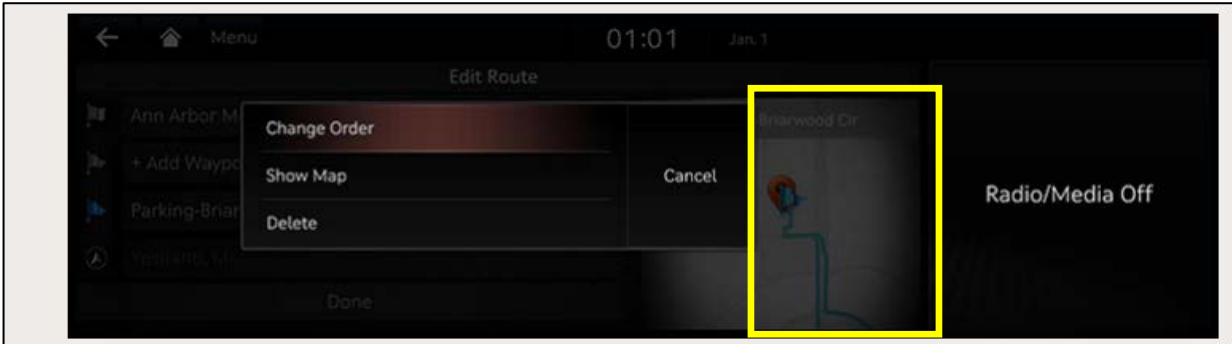
Claim	Claim Element	Evidence of Infringement
		Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.59, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000161) (yellow annotations added).
19[d]	carrying out, by utilizing a route guidance unit of the navigation apparatus, route guidance according to the whole route which is searched for by said route searching step;	<p>Hyundai or another direct infringer carries out, by utilizing a route guidance unit of the navigation apparatus, route guidance according to the whole route which is searched for by said route searching step.</p> <p>For example, Hyundai's navigation device has a route guidance unit to carry out route guidance directing the vehicle to the destination(s) according to the whole route searched for by the route searching unit discussed above.</p> <p><i>See, e.g., Gen5W:</i></p>

Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001334).</p> <p><i>See, e.g., Gen6:</i></p>

Claim	Claim Element	Evidence of Infringement
		<p>SETTING ROUTES FOR NAVIGATION</p> <p>ROUTE DISPLAY</p> <p>After setting a destination, press [Menu] > [Route] on the map screen.</p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.56, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000158).</p> <p><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<p>ROUTE OVERVIEW</p> <p>Checks or edits the rout overview to the set destination.</p> <p>1. Press [Menu] > [Route] > [Route Overview] on the map screen. Or press [Navigation Menu] > [Route] > [Route Overview] on the home screen.</p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.60, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000162).</p> <p><i>See also:</i></p>  <p>Gen 6 Premium Class Navigation, 2021 Genesis G80, Owner's Manual Warranty, at p.59, at https://owners.genesis.com/genesis/us/mygenesis/manuals/glovebox-manual/2021/g80/2021-G80-</p>

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Claim	Claim Element	Evidence of Infringement
		Gen6-Premium-Navigation-Manual.PDF (MEL_HYUN_TECH_00000161) (yellow annotations added).
19[e]	outputting, by utilizing an output unit of the navigation apparatus, a message showing that a vehicle has deviated from a route leading to a first next waypoint toward which the vehicle has been heading when, by said route guidance step, it is determined that the vehicle has deviated from the route to a predetermined distance or more and is traveling along a route after said first next waypoint; and	<p>Hyundai or another direct infringer outputs, by utilizing an output unit of the navigation apparatus, a message showing that a vehicle has deviated from a route leading to a first next waypoint toward which the vehicle has been heading when, by said route guidance step, it is determined that the vehicle has deviated from the route to a predetermined distance or more and is traveling along a route after said first next waypoint.</p> <p>For example, Hyundai's navigation device has an output unit, <i>e.g.</i>, a display screen, to output a message, <i>e.g.</i>, a "Current waypoint was passed. Skip this waypoint?" message, when the route guidance unit discussed above determines that the vehicle has deviated from a route leading to the next waypoint that the vehicle was headed towards. On information and belief, the route guidance unit discussed above determines that the vehicle has deviated from a route by at least a predetermined distance and is traveling along a route to the next waypoint/destination using Hyundai AutoEver and/or HERE data and/or software.</p> <p><i>See, e.g.</i>, Gen5W:</p>

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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="636 867 1906 899">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001333) (yellow line added).</p> <p data-bbox="636 938 751 971"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p><i>See also:</i></p> <p>Hyundai AutoEver is the official navigation system provider for Hyundai and Kia Motors. Hyundai AutoEver Website at https://www.mapnsoft.com/ (MEL_HYUN_TECH_00001350).</p> <p><i>See also:</i></p> <p>CONTRACTOR (MANUFACTURER/ SUPPLIER) NAME: Hyundai Autoever, CORP.</p> <p>...</p>

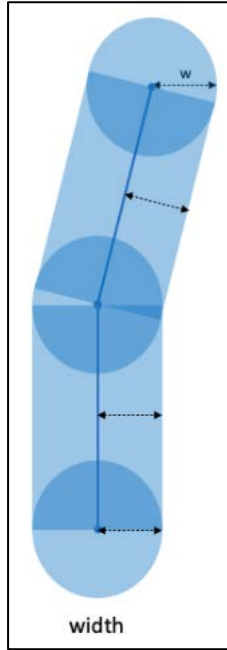
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Claim	Claim Element	Evidence of Infringement
		<p>End-User Terms Required by HERE. The Product utilizes map data that COMPANY licenses from HERE and the following copyright notices apply to such map data (the "HERE Data"): © 2021 HERE. All rights reserved.</p> <p>2022 KIA EV6 Car Infotainment System Quick Reference Guide, at p. 5-34, at https://owners.kia.com/content/owners/en/manuals.html (MEL_HYUN_TECH_00000584) (yellow annotations added).</p> <p><i>See also:</i></p> <div> <div>Listener Name</div> <div>Purpose</div> <div>...</div> <div> <div>RerouteListener</div> <div>Whether a route recalculation has begun as a result of the current position deviating from the original route</div> <div>...</div> <div> <p>Rerouting</p> <p>While navigation is in progress, the following three types of rerouting can occur:</p> <ul style="list-style-type: none"> Basic Route Recalculation - This is performed automatically by the guidance engine. The guidance engine checks the current position to see if it is on the route and approaching the target destination. If it is not, then it triggers a route recalculation and updates the navigation session. <code>RerouteListener.onRerouteBegin()</code> and <code>RerouteListener.onRerouteEnd(RouteResult, RoutingError)</code> callbacks also occur. </div> </div> <p>Navigation Events, HERE Developer, at https://developer.here.com/documentation/android-premium/dev_guide/topics/map-guidance-events.html (MEL_HYUN_TECH_00001342).</p> <p><i>See also:</i></p> </div>

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Claim	Claim Element	Evidence of Infringement
		 <p>The diagram shows a vertical blue oval representing a route. Inside the oval, there are three blue circles representing waypoints. A blue line connects the centers of these waypoints. Horizontal dashed lines with arrows indicate the width of the route at different points. The top width is labeled 'w' and the bottom width is labeled 'width'.</p> <p>Implementing Search Along The Route, HERE Developer, at https://developer.here.com/documentation/geocoding-search-api/dev_guide/topics/implementing-route.html. (MEL_HYUN_TECH_00001347).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>
19[f]	inputting, by utilizing an input unit of the navigation apparatus, a command indicating whether or not to travel via	<p>Hyundai or another direct infringer inputs, by utilizing an input unit of the navigation apparatus, a command indicating whether or not to travel via said first next waypoint in response to the outputted message.</p> <p>For example, Hyundai's navigation device has an input unit, <i>e.g.</i>, touchscreen and/or button configured to input a command indicating whether or not to travel to the next waypoint/final destination discussed above, including to skip the next waypoint by pressing the "Yes" button, in response to the message outputted by the output unit discussed above.</p>

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Claim	Claim Element	Evidence of Infringement
	said first next waypoint in response to the outputted message.	<p data-bbox="632 207 863 240"><i>See, e.g., Gen5W:</i></p>  <p data-bbox="632 938 1902 1008">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001332) (yellow annotations added).</p> <p data-bbox="632 1049 747 1081"><i>See also:</i></p>

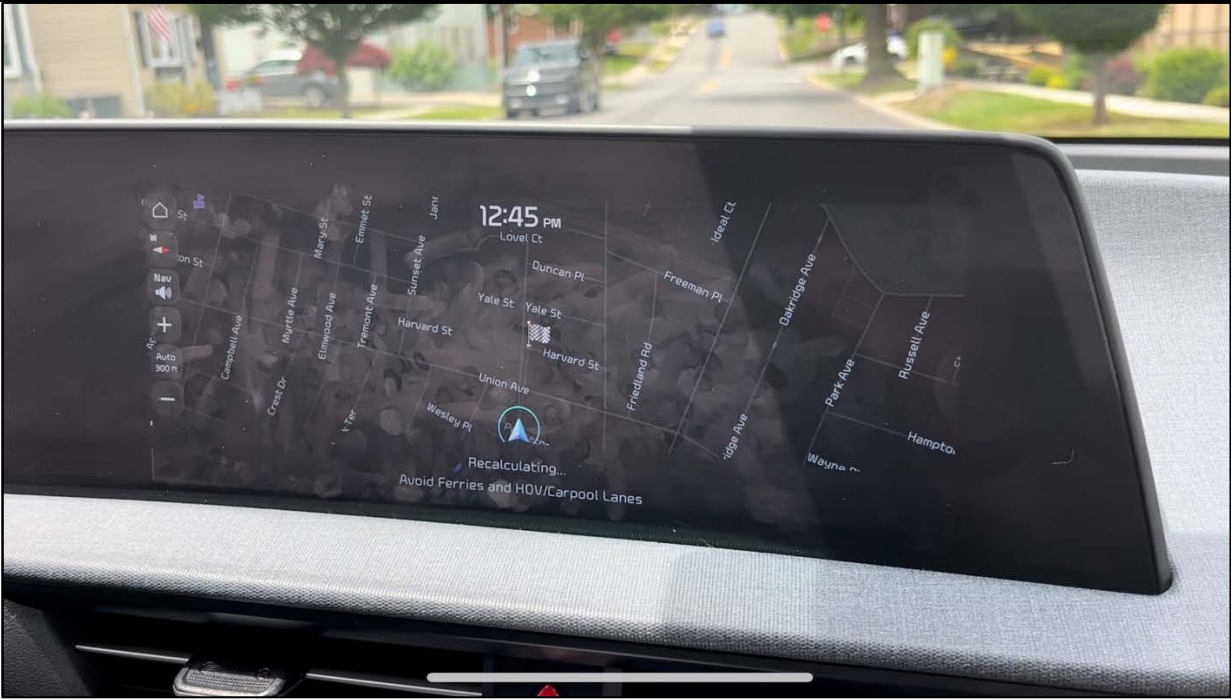
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Claim	Claim Element	Evidence of Infringement
		 <p data-bbox="632 873 1906 943">Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001335) (yellow annotations added).</p> <p data-bbox="632 980 747 1010"><i>See also:</i></p>

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Claim	Claim Element	Evidence of Infringement
		<div></div> <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001336).</p> <p><i>See also:</i></p>

Claim	Claim Element	Evidence of Infringement
		 <p>Photo of 2022 KIA EV6 Navigation System (MEL_HYUN_TECH_00001337).</p> <p>On information and belief, Hyundai's Gen6 infotainment system includes the same or substantially similar functionality as Hyundai's Gen5W system. <i>See Gen5W above.</i></p>

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