

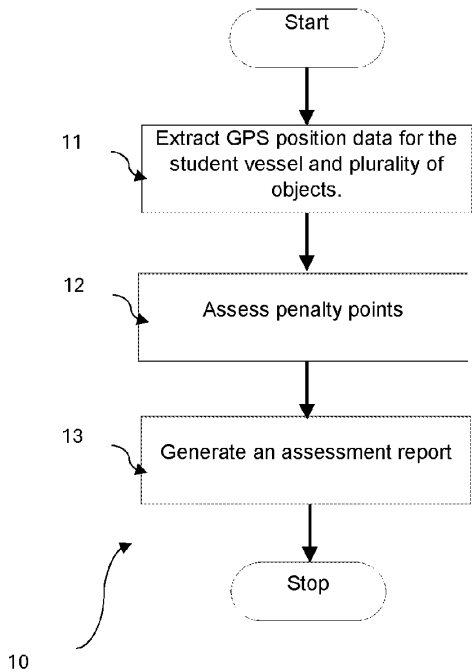


FIG. 1A

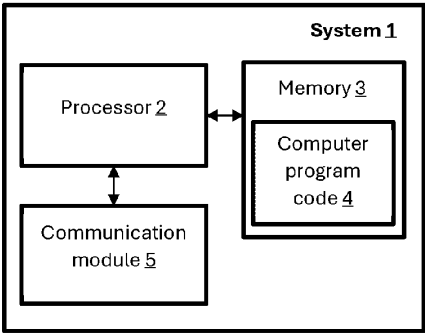


FIG. 1B

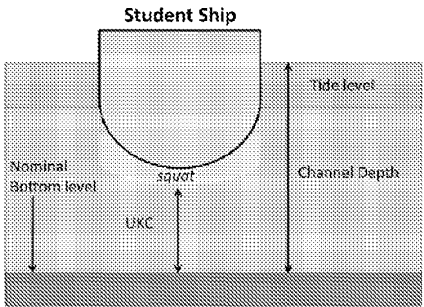


FIG. 2

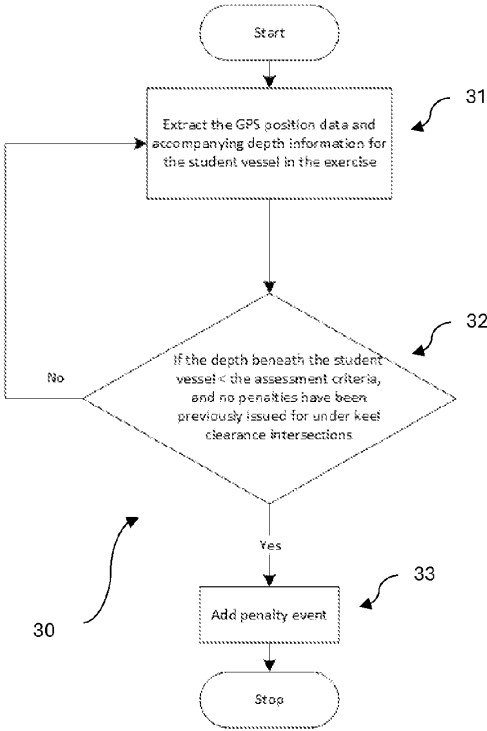


FIG. 3

UKC Settings						
UKC Settings						
Ship Type:						
Other						
Search						
Description	Ship Type	Ship Length(m)	Recommended Min UKC	Assessment Min UKC	Action	
Minimum UKC when making way in depth of water of more than two times the ship's draft	Other	< 50	1x ship draft	1x ship draft		
Minimum UKC when making way in shallow water, is depth less than two times the ship's draft	Other	< 50	3.5 m	3.5 m		
Minimum UKC when at anchor	Other	< 50	2.0 m	0.2 m		
Minimum UKC when making way in depth of water of more than two times the ship's draft	Other	50 - 100	1x ship draft	1x ship draft		



FIG. 4

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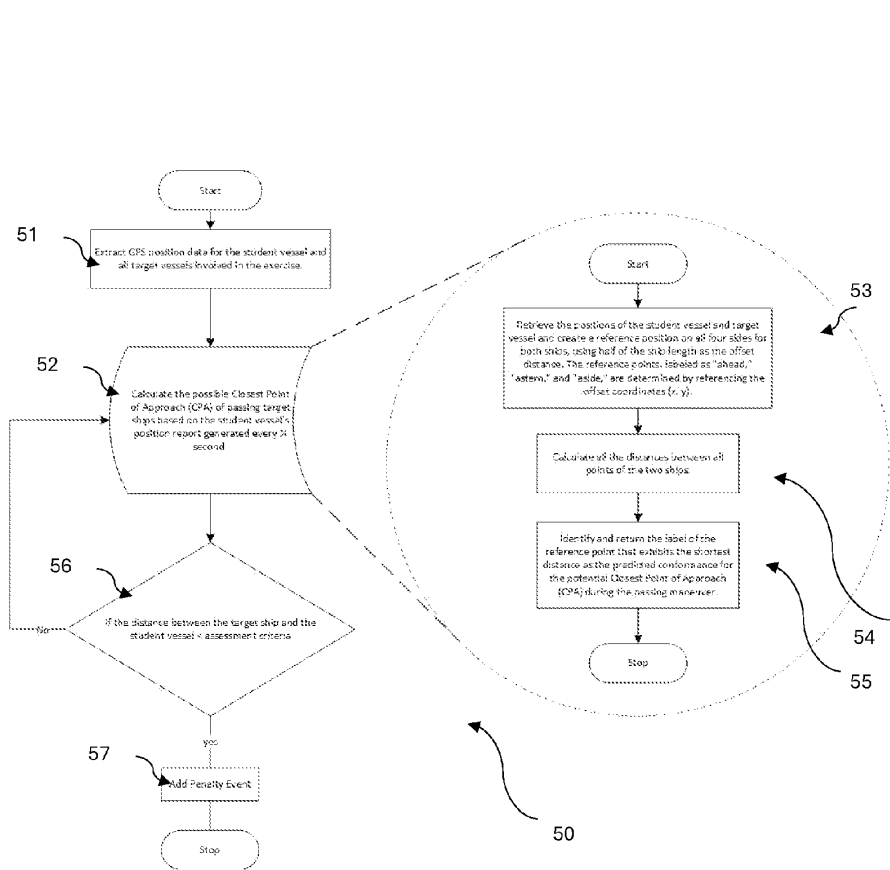


FIG. 5

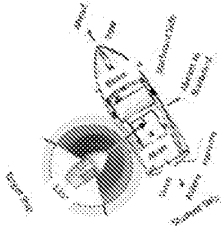
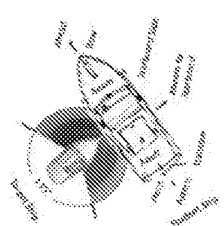
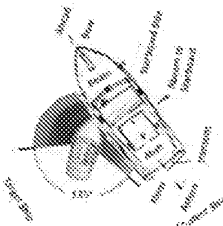
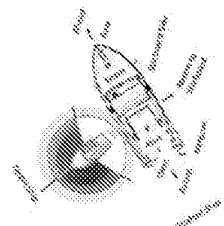
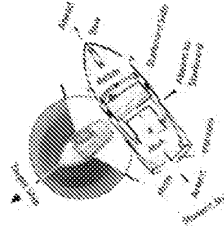
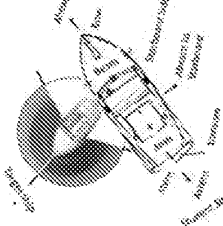
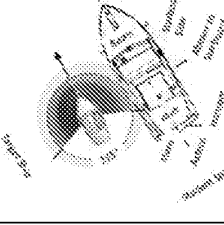
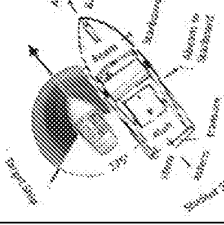
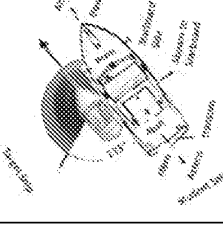
		Penalty		
		Unsafe Navigation	Near Miss	Collision
Vessel Encounter	Passing Ahead			
	Passing Astern			
	Side by Side			

FIG. 6

CPA Settings

CPA Settings

Ship Type:

Other

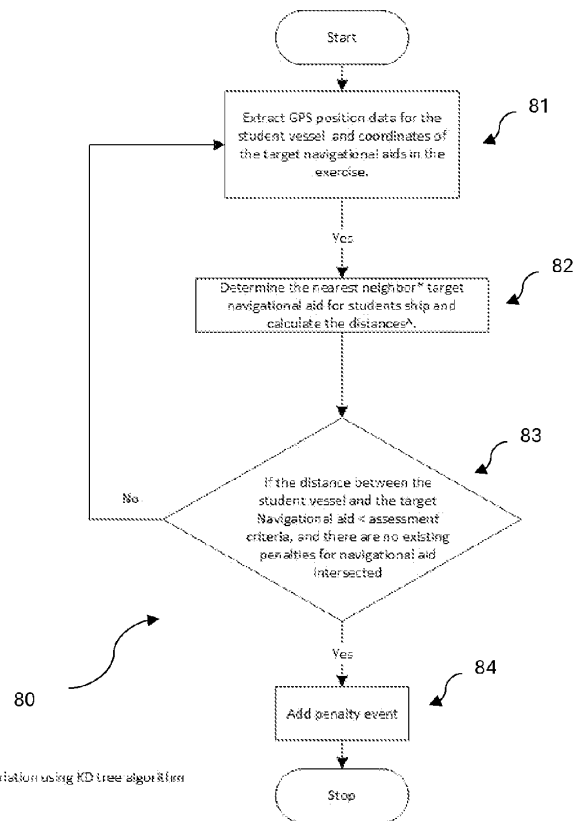
Search

Description	Ship Type	Ship Length(m)	Recommended Standard (m)	Assessment Standard (m)	Recommended Near Miss (m)	Action
CPA with other vessels in conditions of moderate to heavy traffic density and good visibility	Other	≤ 30	0.4	0.4	0.2	
CPA with other vessels in conditions of moderate to heavy traffic density and moderate visibility	Other	> 30	0.5	0.5	0.2	



FIG. 7

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**FIG. 8**

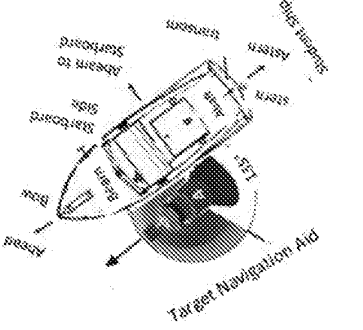
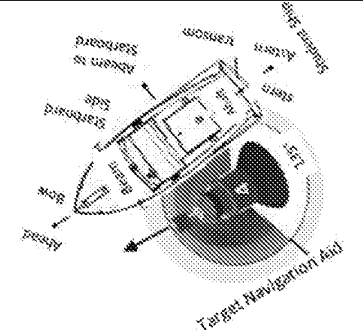
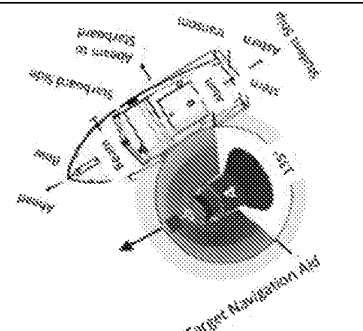
Penalty	Collision	
	Near Miss	
	Unsafe Navigation	
	Passing Buoy	
	Buoy Encounter	

FIG. 9

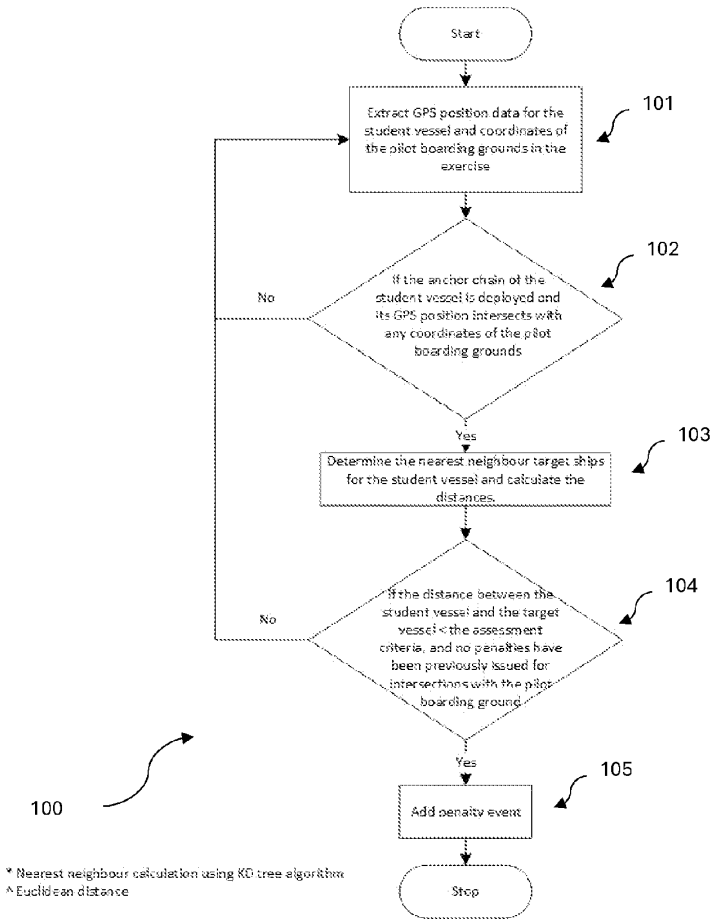


FIG. 10

Distances Settings

Distances Settings

Ship Type:

Other

Q Search...

Description	Ship Type	Ship Length(m)	Recommended Standard (m)	Assessment Standard (m)	Recommended Rear Miss (m)	Action
Minimum distance when passing recreational aids, such as buoys and beacons	Other	< 50	0.3	0.15	0.1	
Minimum distance when passing danger zones, such as wreck and shoal	Other	< 50	0.5	0.3	0.2	
Distance to maintain from another ship in the vicinity while waiting for pilot or embarking/disembarking at pilot at pilot boarding ground	Other	< 50	0.5	0.3	0.2	



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FIG. 11

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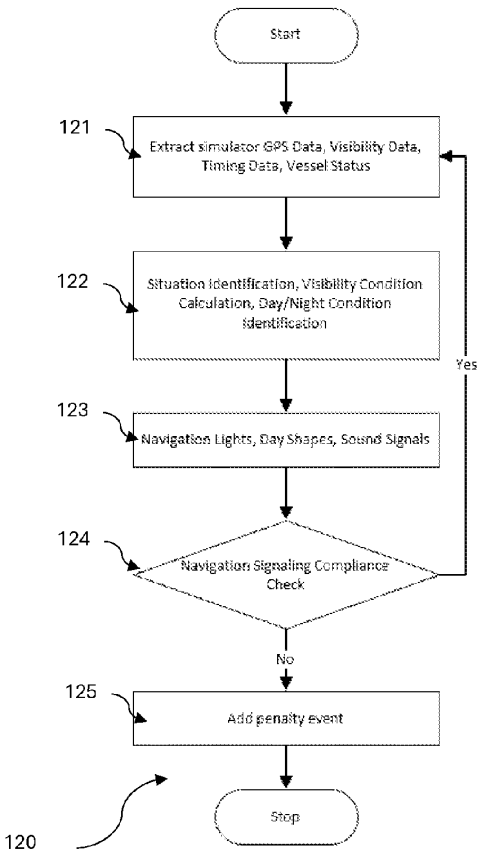
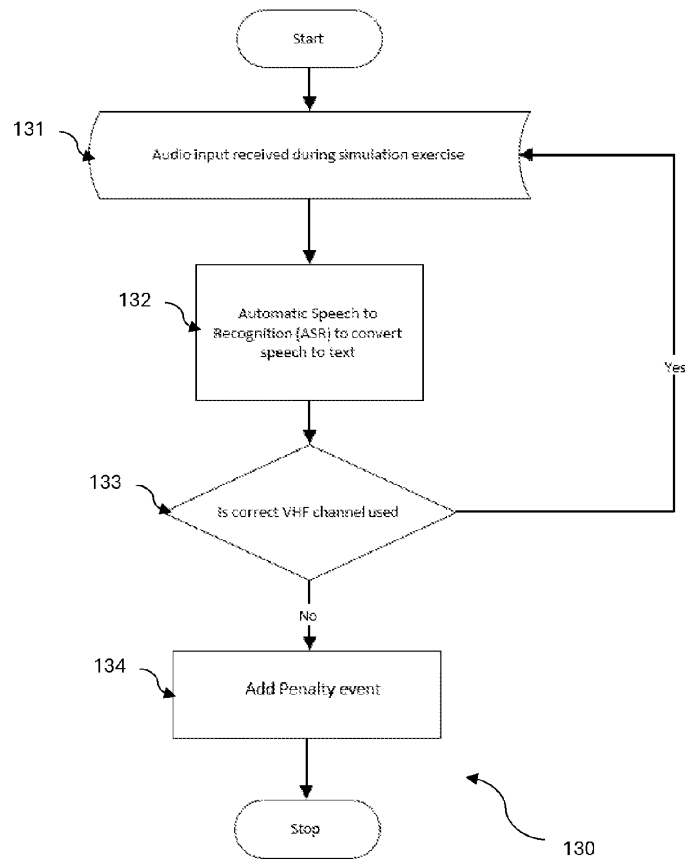


FIG. 12

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**FIG. 13**

Channel Number	Frequency (MHz)	Authority	Purpose
16	156.8	Universal	Internationally designated for distress, safety, and initial contact. Used for both emergency and non-emergency communications.
70	156.525	Universal	Dedicated to Digital Selective Calling (DSC) for distress, safety, and routine digital calls. Automates call setup to enhance efficiency and response time in emergencies.
75 & 76	-	Universal	Serve as guard channels adjacent to Channel 16, ensuring constant monitoring and availability for emergency communications.
11, 12, 14	156.550, 156.600, 156.700	Port Operations	Essential for safe and efficient movement of vessels within port areas, facilitating communication during port operations including berthing and docking.
9	156.45	Port Operations	Frequently used by pilots and for port operations, serves as a calling channel and facilitates communications within marinas.
10	156.5	Singapore VTS	Supports general working communications, ship-to-air interactions, search and rescue, and port operations in international waters. Managed by Singapore VTS in Sector 9.
13	156.65	Universal	Important for bridge-to-bridge communication and navigation safety, particularly for vessels over 20 meters in length.
6	156.3	Universal	Commonly utilized for ship-to-ship and ship-to-air communication, especially during search and rescue operations.
18 to 28	157.000 to 157.400	Universal	Mainly used for public correspondence and port operations, facilitating ship-to-shore communications and linking ship stations with shore authorities.
66	-	Klang VTS	Used within Sector 1 for communication related to vessel traffic management and navigational assistance.
88	-	Klang VTS and Johor VTS	Extensively used in multiple sectors (Sector 2, 5, 6 by Klang VTS and Sector 6 by Johor VTS) for vessel traffic management, navigational advice, and operational coordination.
84	-	Klang VTS	Allocated for Sector 3, used for managing vessel movements, providing navigational assistance, and ensuring safety within the sector controlled by Klang VTS.
61	-	Klang VTS	Used in Sector 4, crucial for effective communication related to vessel traffic management, safety broadcasts, and coordination of vessel movements.
73	-	Singapore VTS	Operated within Sector 7, designated for communications that facilitate safe and efficient vessel navigation and coordination in the Singapore VTS zone.
14	-	Singapore VTS	Used in Sector 8, essential for managing vessel traffic, providing navigational instructions, and coordinating port operations within the Singapore VTS area.

FIG. 14

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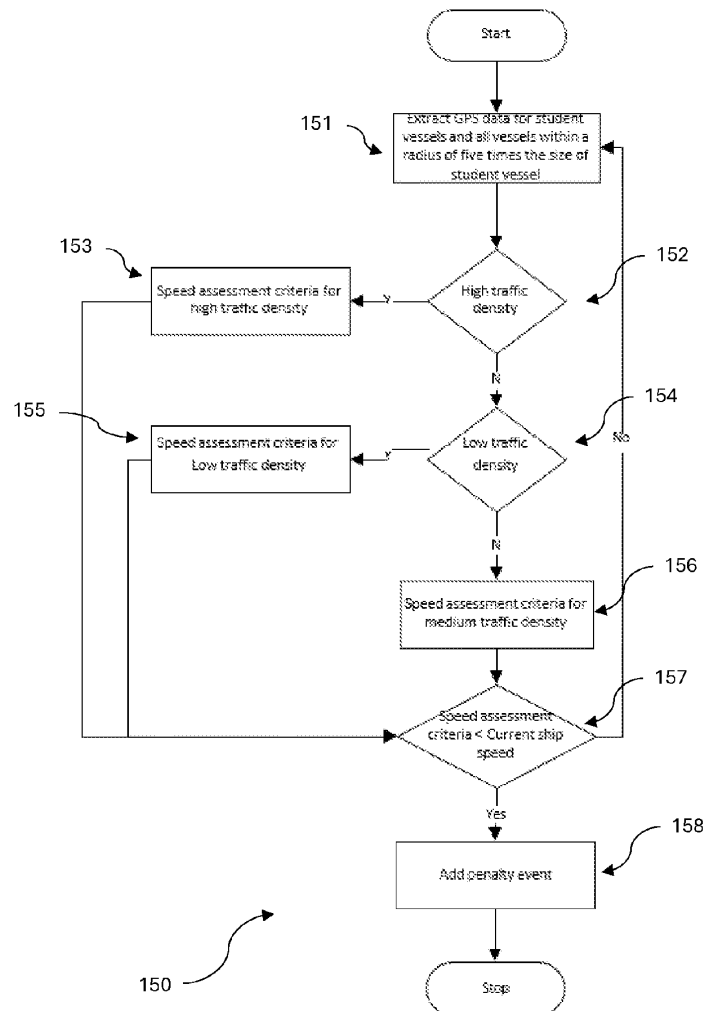
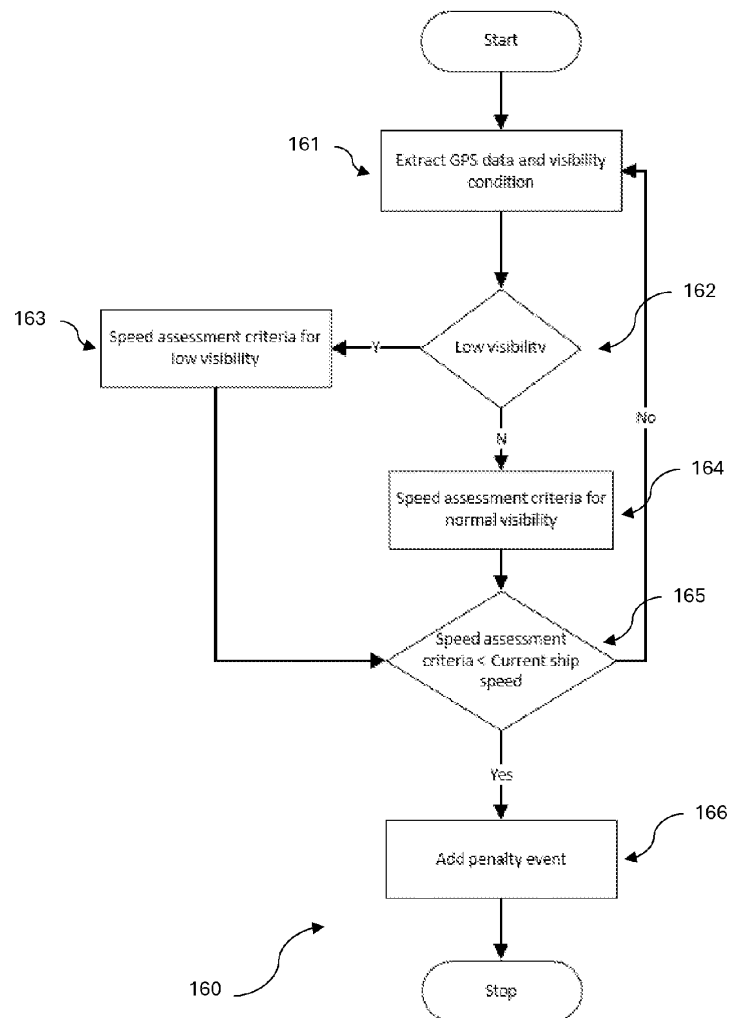


FIG. 15

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**FIG. 16**

Exercise Name:	CE1401-Advanced Navigation	Student:	123456 John Doe	Separate Page Mode:	Yes
Scenario 1:	Scenario 1	Scenario 2:	Scenario 2	Student Classification Level:	Level 1
Course Name:	Course Name	Field Name:	Field Name	Units:	Units
GP	GP	GP	GP	Field	Field
Student Ship Type:	Student Ship Type	Student Ship Length:	Student Ship Length	Student Ship Speed:	Student Ship Speed
Course:	Course	GP	GP	GP	GP
Report Type:	Report Type	End of Exercise:	End of Exercise	Student Ship Length Category:	Student Ship Length Category
2024-Jul-22 14:25	2024-Jul-22 14:25	2024-Jul-22 14:25	2024-Jul-22 14:25	2024-Jul-22 14:25	2024-Jul-22 14:25

Exercise Time	Simulation Time	Conditions/Events	Event Details	Navigation Elements	Assessment Value	Assess Value	Compliance	Points Deduction	Identified Risks
2024-Jul-22 14:29	2024-Jul-22 14:29	Start of Exercise							
2024-Jul-22 14:33	2024-Jul-22 14:33	They engage to estimate the ship status	They engage	They engage	React within 2 Min	5 Minutes	N	10	Unsafe Navigation
2024-Jul-22 14:36	2024-Jul-22 14:36	Passing navigation aids	Passing navigation aids	Side Distance	0.15 NM	0.09 NM	N	5	Unsafe Navigation
2024-Jul-22 14:42	2024-Jul-22 14:42	Collision avoidance	Collision avoidance	CPA	0.1 NM	0.02 NM	N	10	Near miss
2024-Jul-22 14:46	2024-Jul-22 14:46	Passing side by side	Passing side by side	Side Speed	2 NM/PM	2 NM/PM	N	10	Unsafe Navigation
2024-Jul-22 14:53	2024-Jul-22 14:53	Speed in low visibility condition	Speed in low visibility condition	Side Speed	4 NM/PM	4 NM/PM	N	10	Unsafe Navigation
2024-Jul-22 15:05	2024-Jul-22 15:05	Speed in high traffic density condition	Speed in high traffic density condition	YTS Expansion	71 Channel	71 Channel	N	10	Unsafe Navigation
2024-Jul-22 15:15	2024-Jul-22 15:15	YTS communication	YTS communication	Side Distance	0.15 NM	0.02 NM	N	5	Unsafe Navigation
2024-Jul-22 15:18	2024-Jul-22 15:18	Passing navigation aids	Passing navigation aids	Side Distance	0.15 NM	0.02 NM	N	5	Unsafe Navigation
2024-Jul-22 15:20	2024-Jul-22 15:20	Navigation signaling in low visibility condition	Navigation signaling in low visibility condition	Sound Signal	Two prolonged blasts and one short blast	-	N	5	Unsafe Navigation
2024-Jul-22 15:23	2024-Jul-22 15:23	End of Exercise							

FIG. 17

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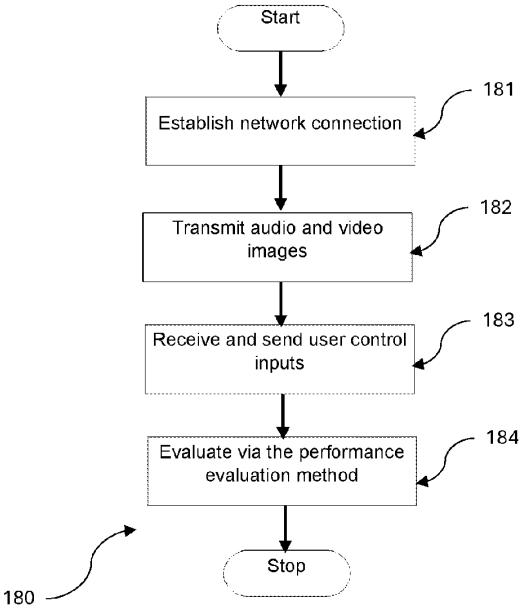


FIG. 18A

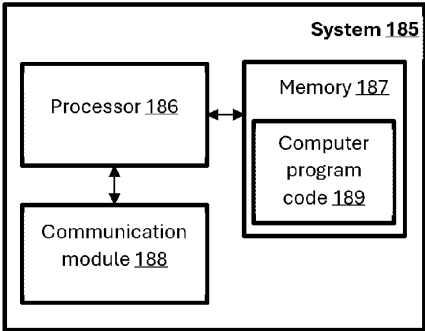


FIG. 18B

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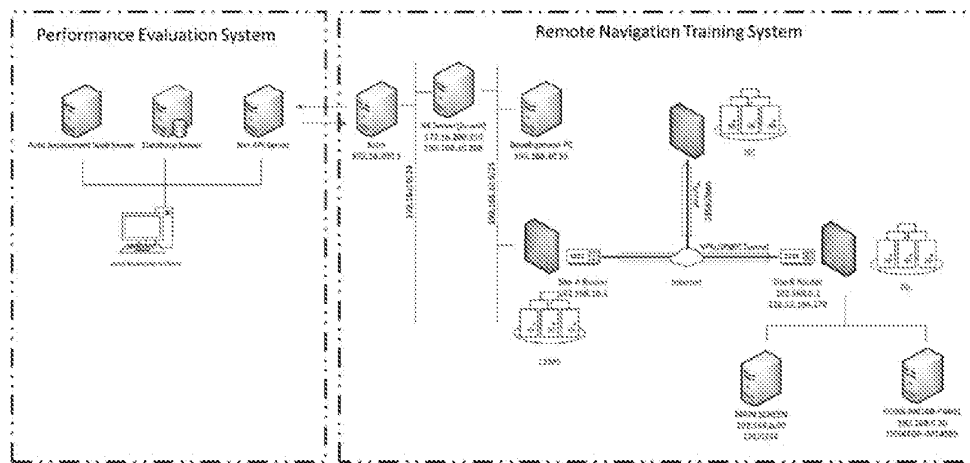


FIG. 18C

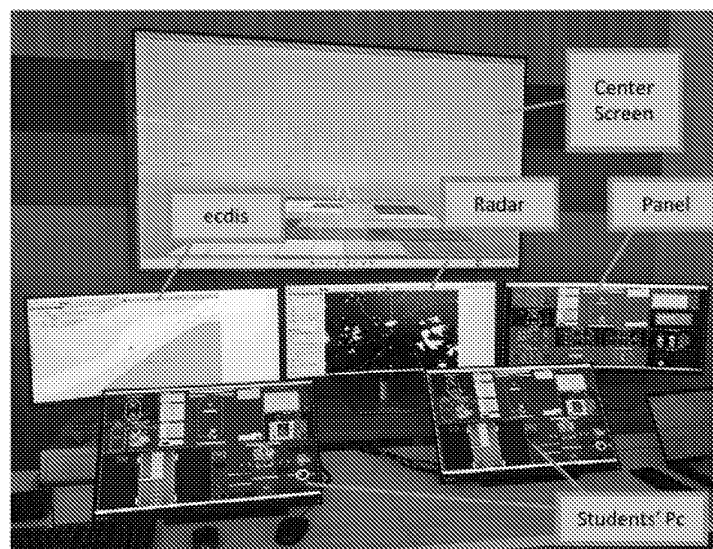


FIG. 19

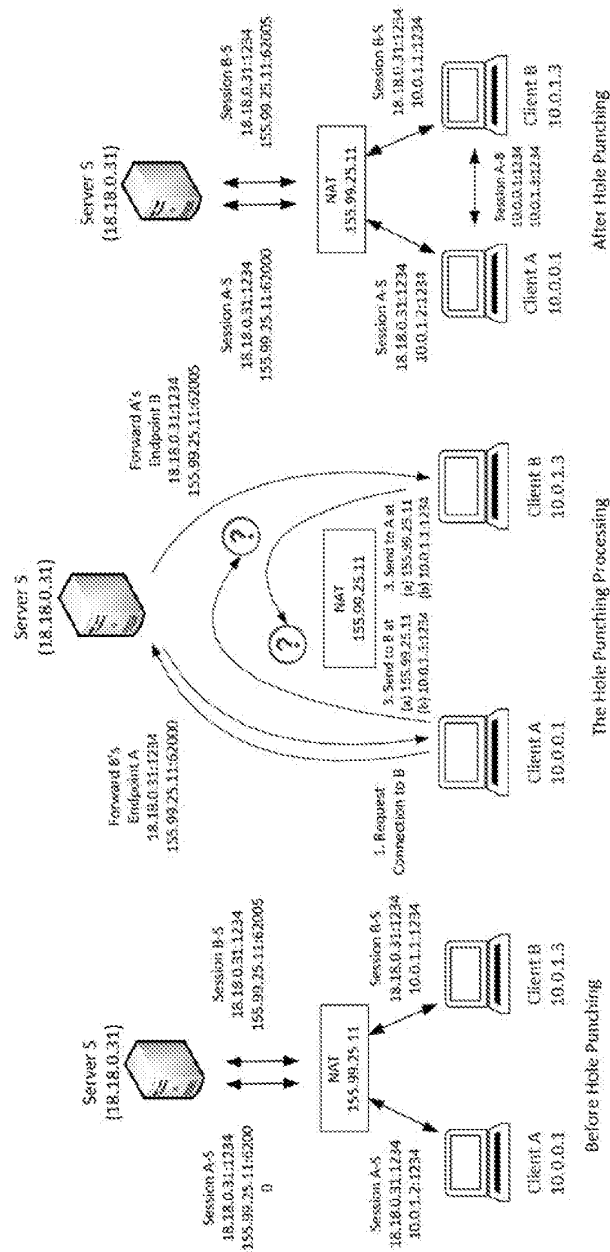


FIG. 20

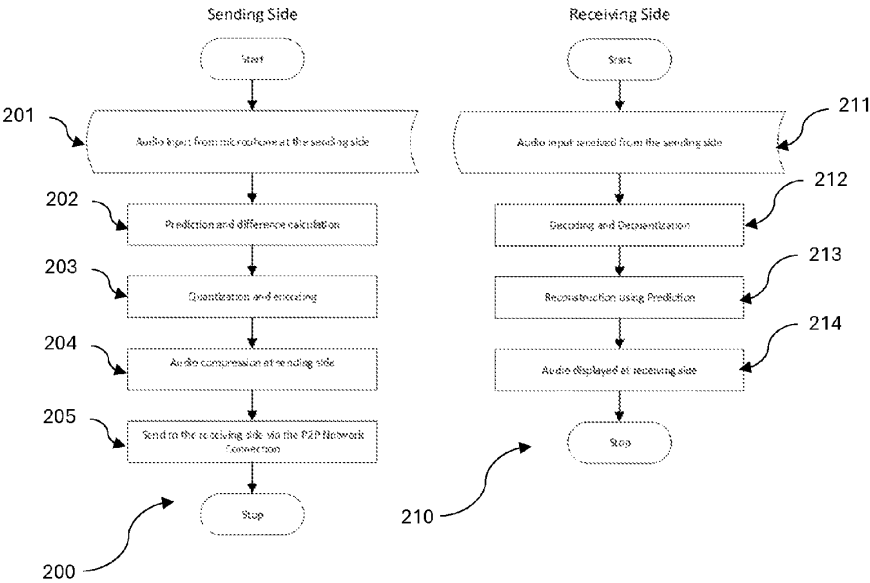


FIG. 21

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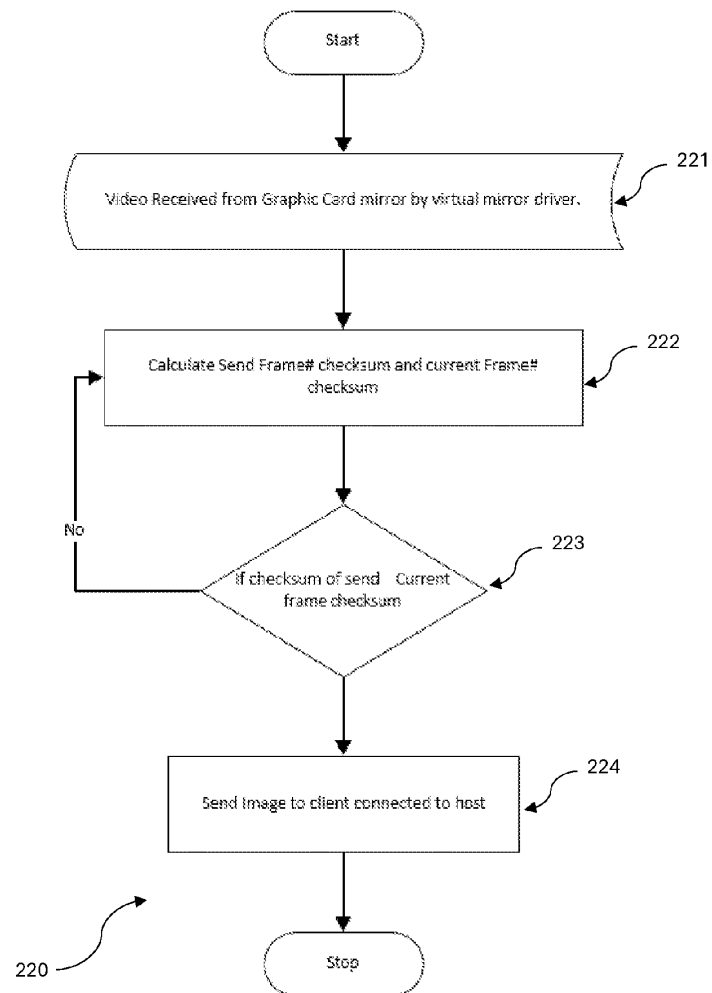


FIG. 22