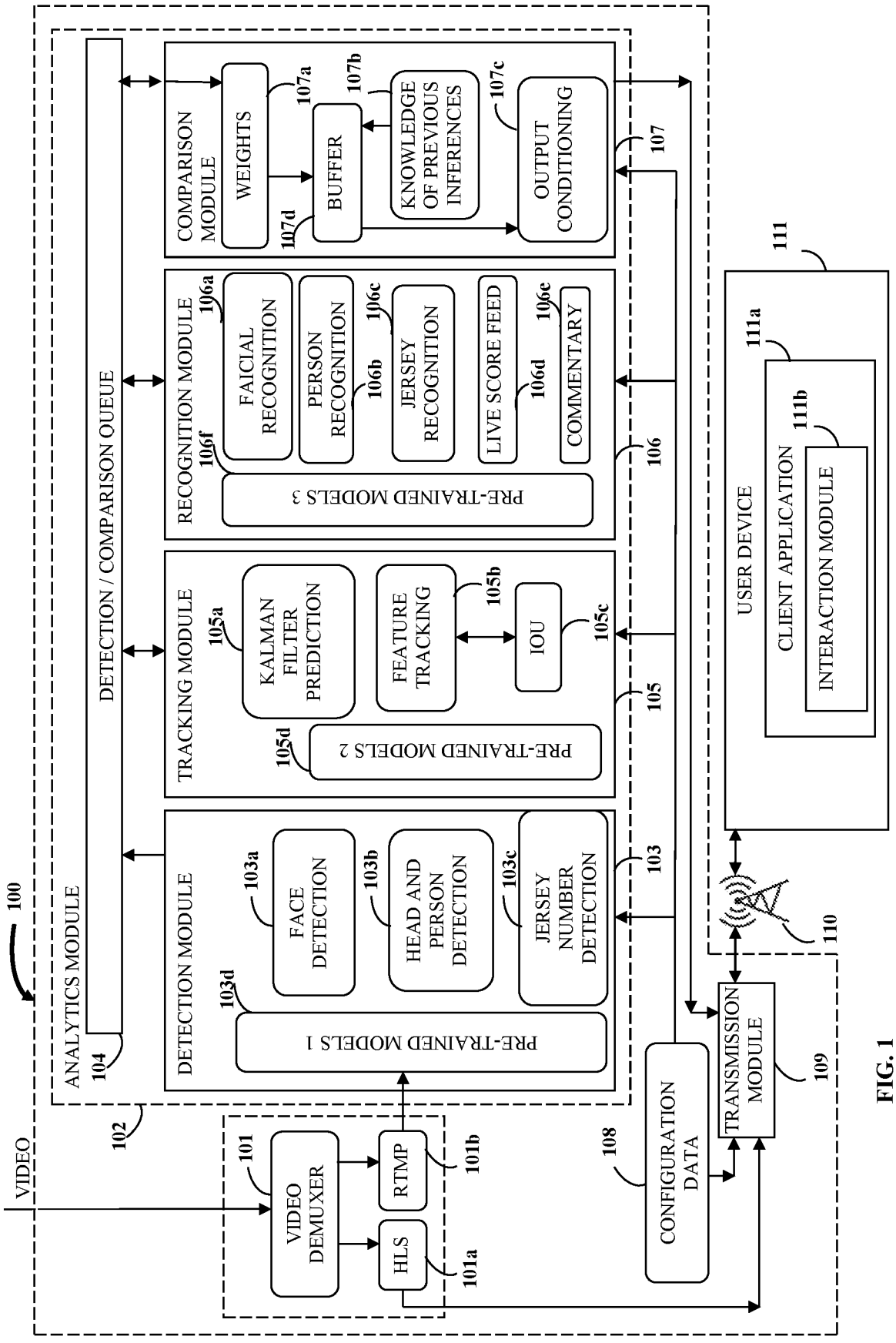
100
VIDEO
ANALYTICS MODULE
DETECTION / COMPARISON QUEUE
104
102
101
VIDEO DEMUXER
HLS
RTMP
101a
101b
DETECTION MODULE
103a
FACE DETECTION
103b
HEAD AND PERSON DETECTION
103c
JERSEY NUMBER DETECTION
103d
PRE-TRAINED MODELS 1
103
TRACKING MODULE
105a
KALMAN FILTER PREDICTION
FEATURE TRACKING
105b
IOU
105c
PRE-TRAINED MODELS 2
105d
105
RECOGNITION MODULE
106a
FAICIAL RECOGNITION
PERSON RECOGNITION
106b
106c
JERSEY RECOGNITION
LIVE SCORE FEED
106d
106e
COMMENTARY
PRE-TRAINED MODELS 3
106f
106
COMPARISON MODULE
WEIGHTS
107a
BUFFER
107b
KNOWLEDGE OF PREVIOUS INFERENCES
107c
OUTPUT CONDITIONING
107d
107
CONFIGURATION DATA
108
TRANSMISSION MODULE
109
110
USER DEVICE
111
111a
CLIENT APPLICATION
111b
INTERACTION MODULE

FIG. 1

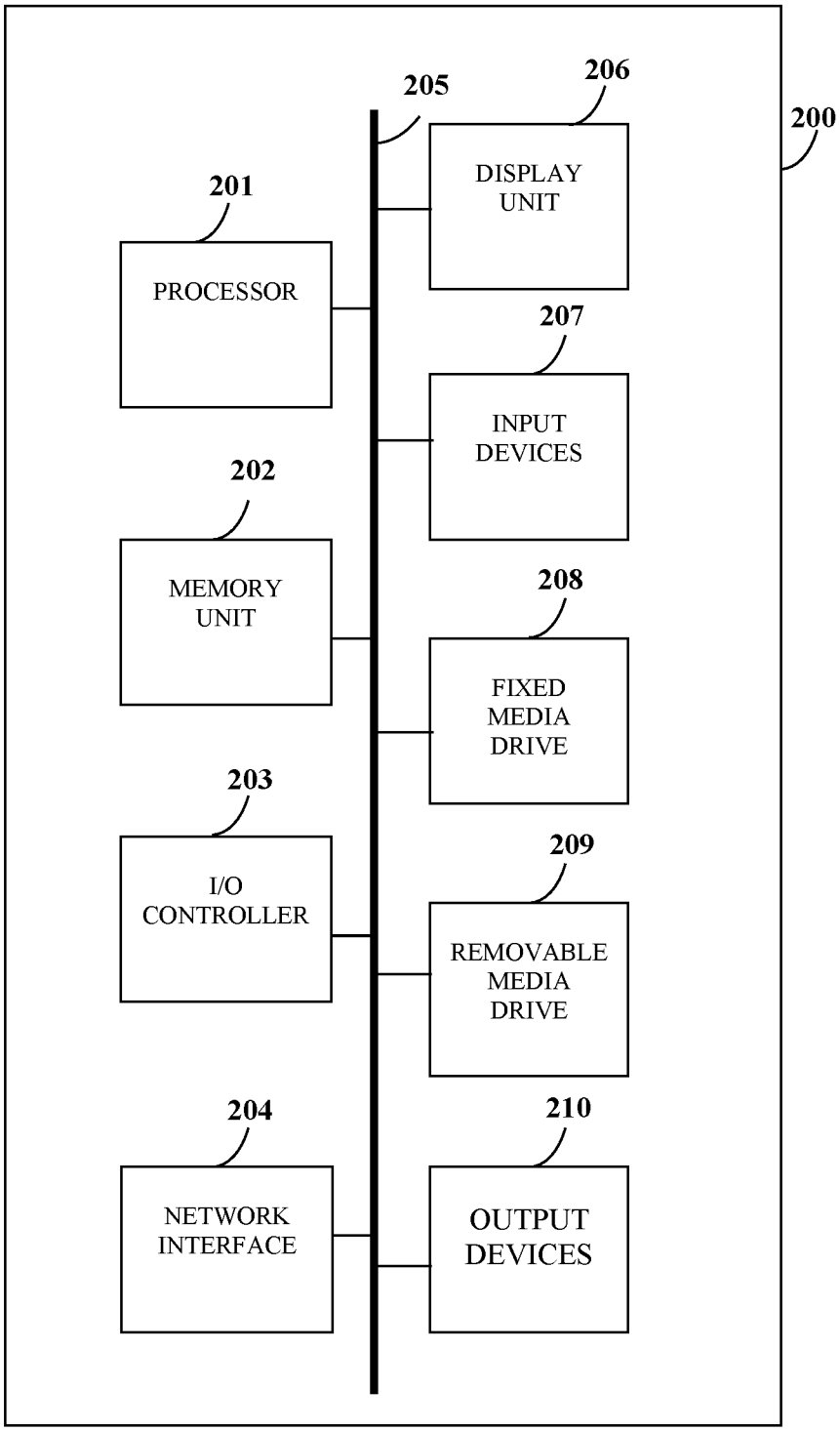
200
205
206
DISPLAY UNIT
201
PROCESSOR
207
INPUT DEVICES
202
MEMORY UNIT
208
FIXED MEDIA DRIVE
203
I/O CONTROLLER
209
REMOVABLE MEDIA DRIVE
204
NETWORK INTERFACE
210
OUTPUT DEVICES

FIG. 2

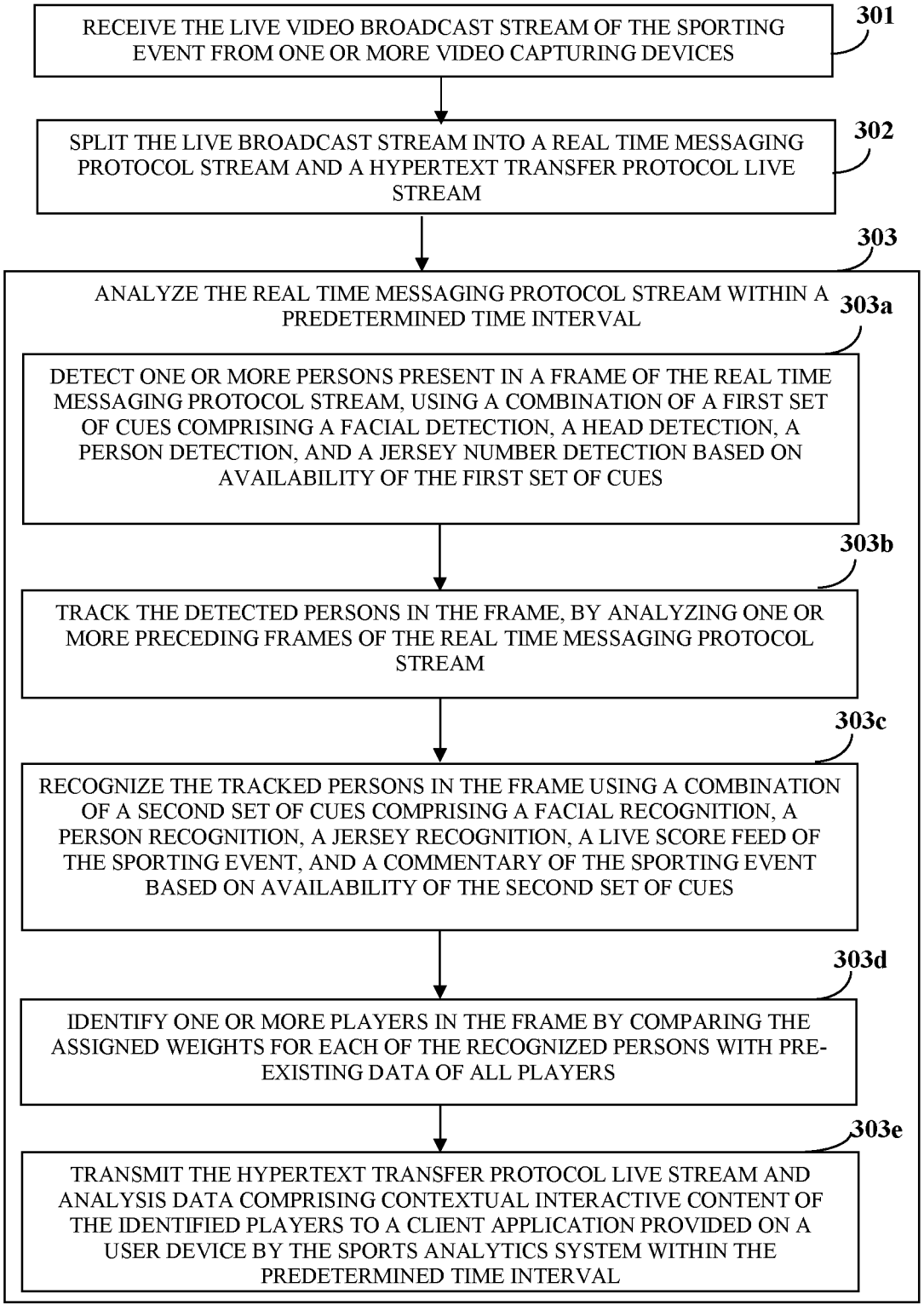
RECEIVE THE LIVE VIDEO BROADCAST STREAM OF THE SPORTING EVENT FROM ONE OR MORE VIDEO CAPTURING DEVICES
301
SPLIT THE LIVE BROADCAST STREAM INTO A REAL TIME MESSAGING PROTOCOL STREAM AND A HYPERTEXT TRANSFER PROTOCOL LIVE STREAM
302
303
ANALYZE THE REAL TIME MESSAGING PROTOCOL STREAM WITHIN A PREDETERMINED TIME INTERVAL
303a
DETECT ONE OR MORE PERSONS PRESENT IN A FRAME OF THE REAL TIME MESSAGING PROTOCOL STREAM, USING A COMBINATION OF A FIRST SET OF CUES COMPRISING A FACIAL DETECTION, A HEAD DETECTION, A PERSON DETECTION, AND A JERSEY NUMBER DETECTION BASED ON AVAILABILITY OF THE FIRST SET OF CUES
303b
TRACK THE DETECTED PERSONS IN THE FRAME, BY ANALYZING ONE OR MORE PRECEDING FRAMES OF THE REAL TIME MESSAGING PROTOCOL STREAM
303c
RECOGNIZE THE TRACKED PERSONS IN THE FRAME USING A COMBINATION OF A SECOND SET OF CUES COMPRISING A FACIAL RECOGNITION, A PERSON RECOGNITION, A JERSEY RECOGNITION, A LIVE SCORE FEED OF THE SPORTING EVENT, AND A COMMENTARY OF THE SPORTING EVENT BASED ON AVAILABILITY OF THE SECOND SET OF CUES
303d
IDENTIFY ONE OR MORE PLAYERS IN THE FRAME BY COMPARING THE ASSIGNED WEIGHTS FOR EACH OF THE RECOGNIZED PERSONS WITH PRE-EXISTING DATA OF ALL PLAYERS
303e
TRANSMIT THE HYPERTEXT TRANSFER PROTOCOL LIVE STREAM AND ANALYSIS DATA COMPRISING CONTEXTUAL INTERACTIVE CONTENT OF THE IDENTIFIED PLAYERS TO A CLIENT APPLICATION PROVIDED ON A USER DEVICE BY THE SPORTS ANALYTICS SYSTEM WITHIN THE PREDETERMINED TIME INTERVAL

FIG. 3

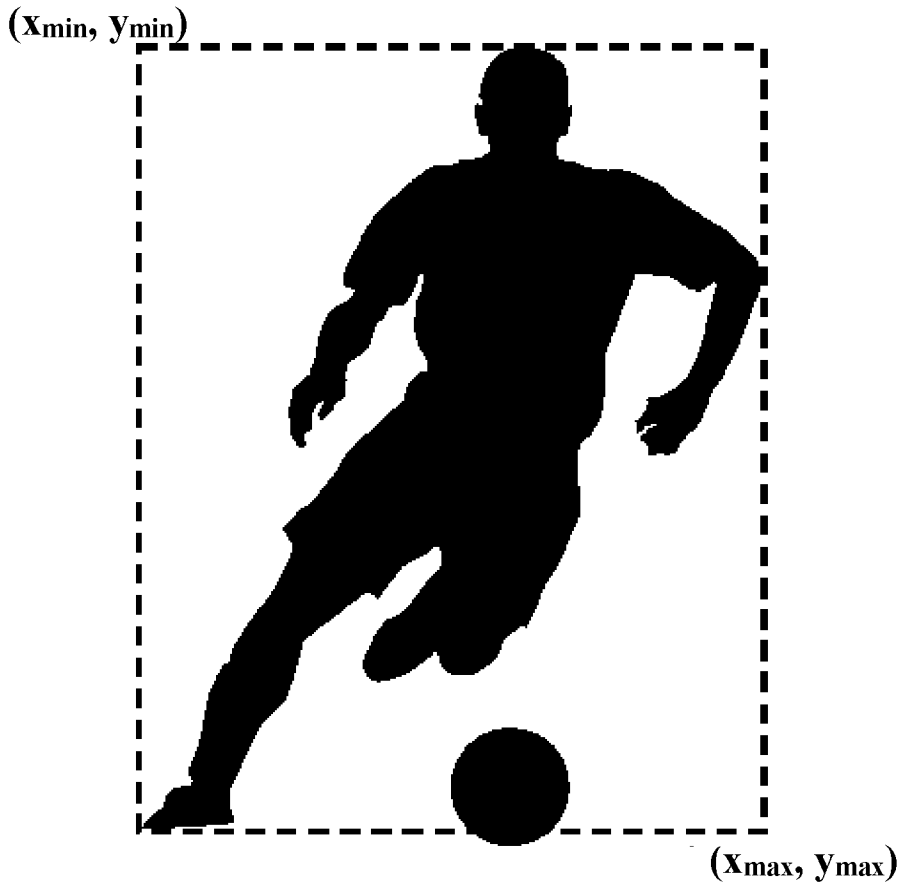

FIG. 4A

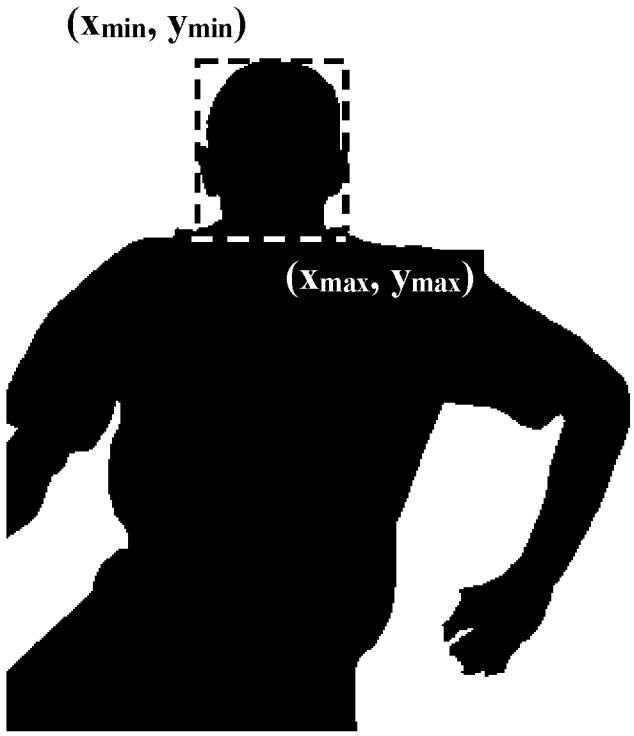

FIG. 4B

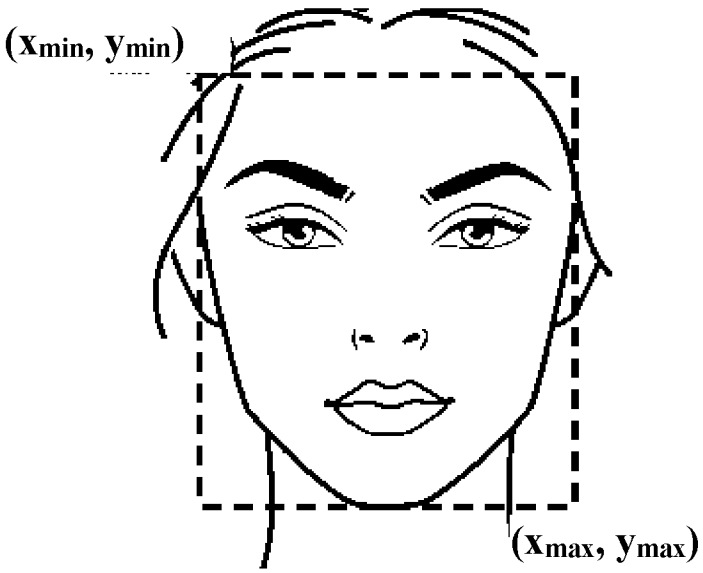

FIG. 4C



FIG. 4D

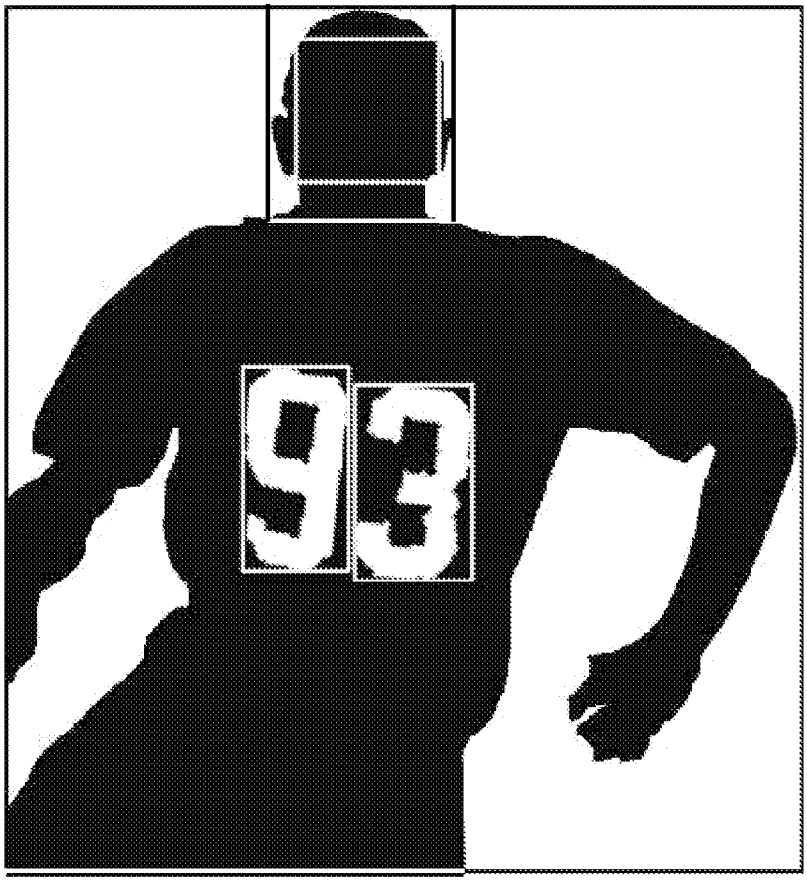

FIG. 4E

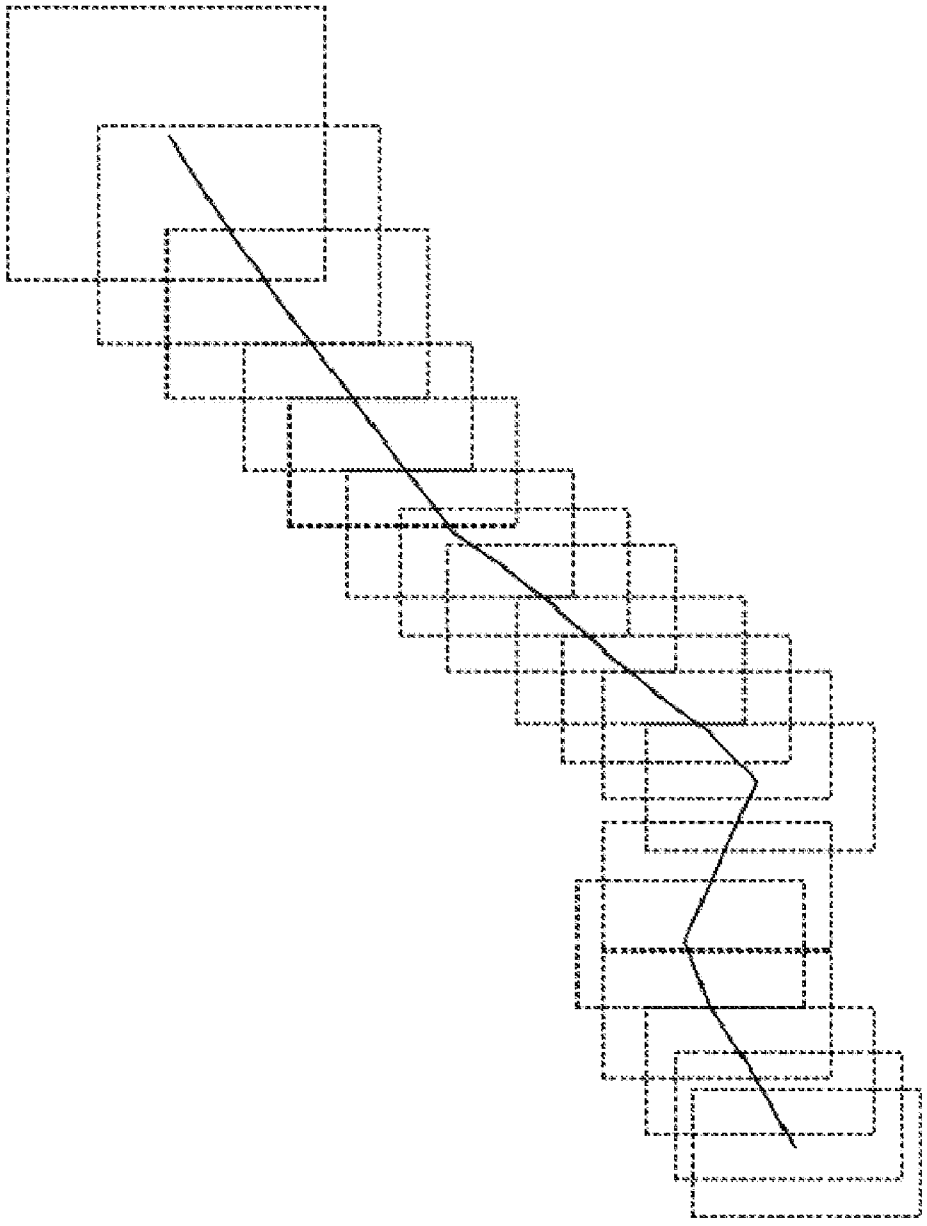

FIG. 5

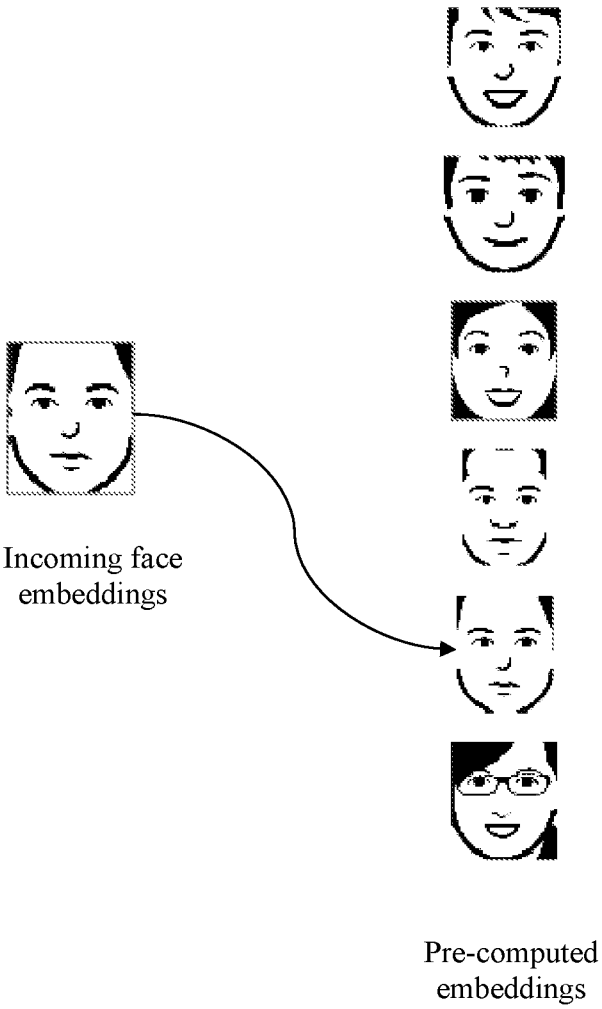

FIG. 6A

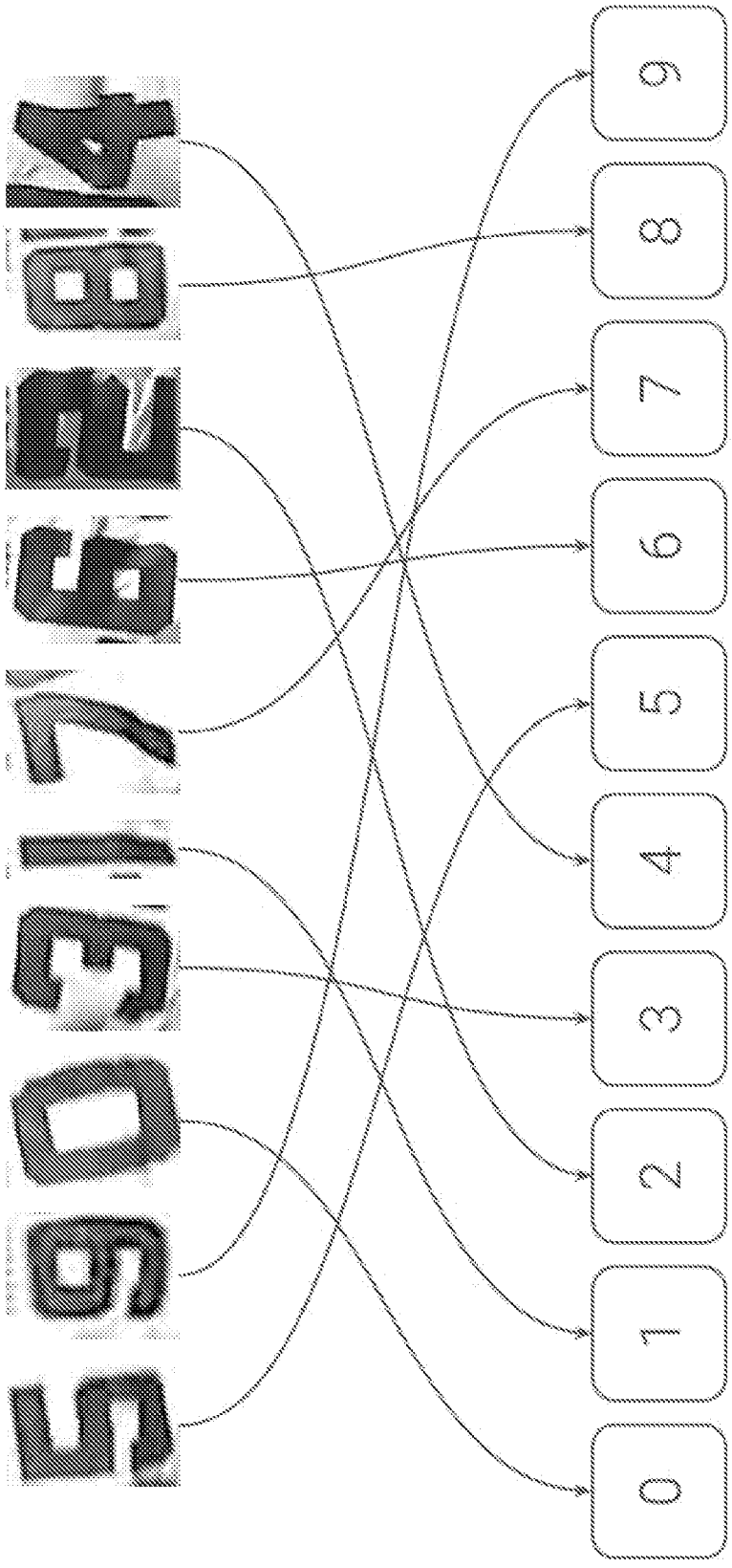

FIG. 6B

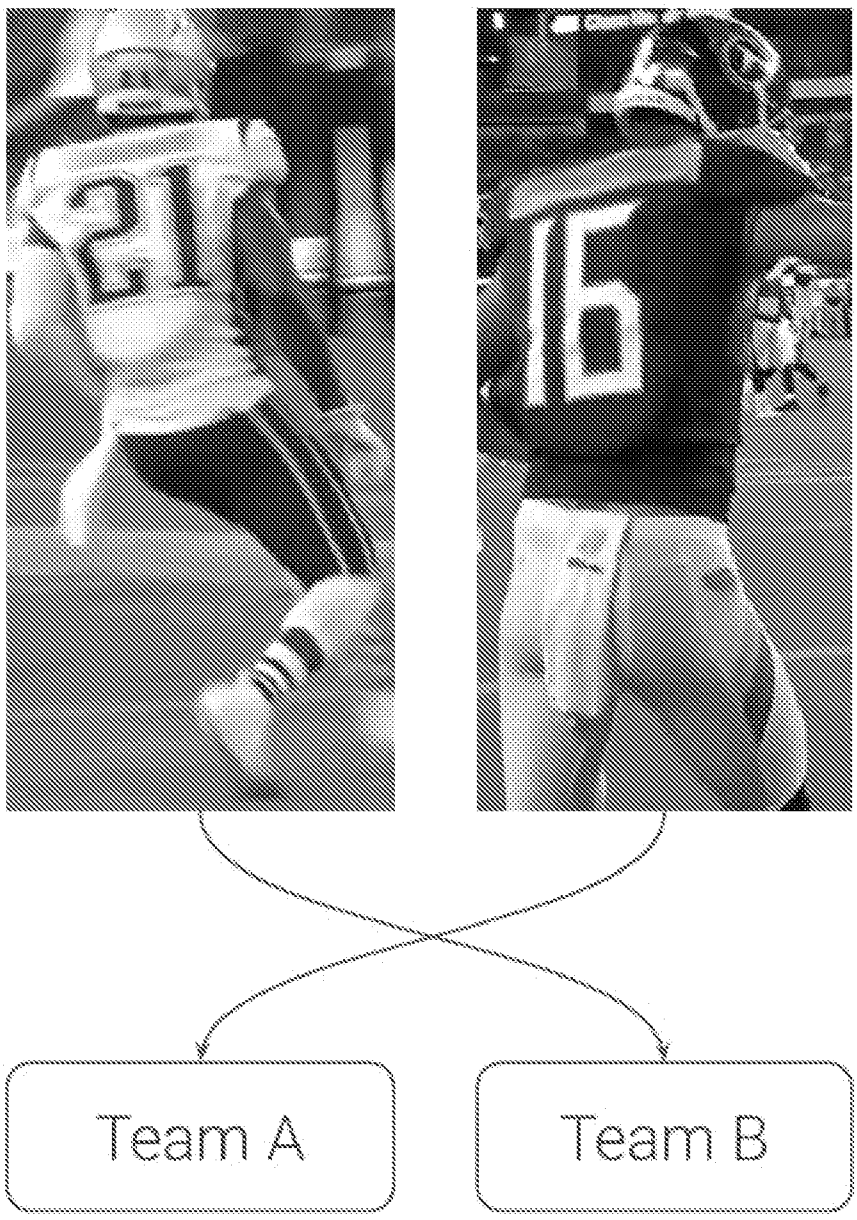

FIG. 6C

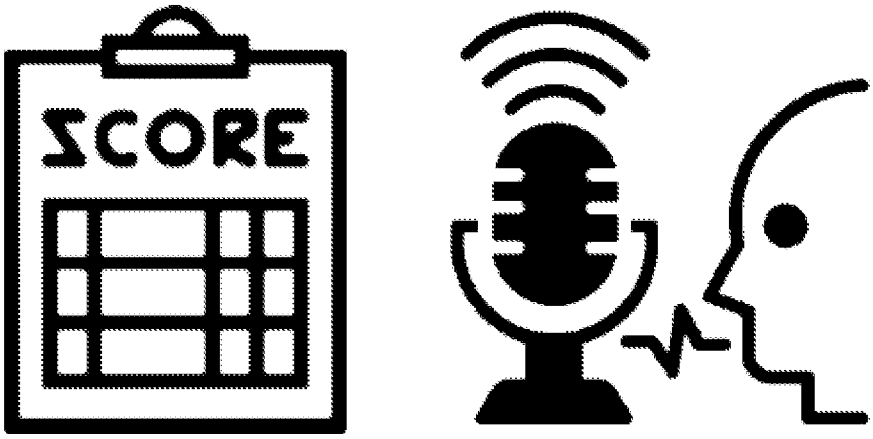

FIG. 6D

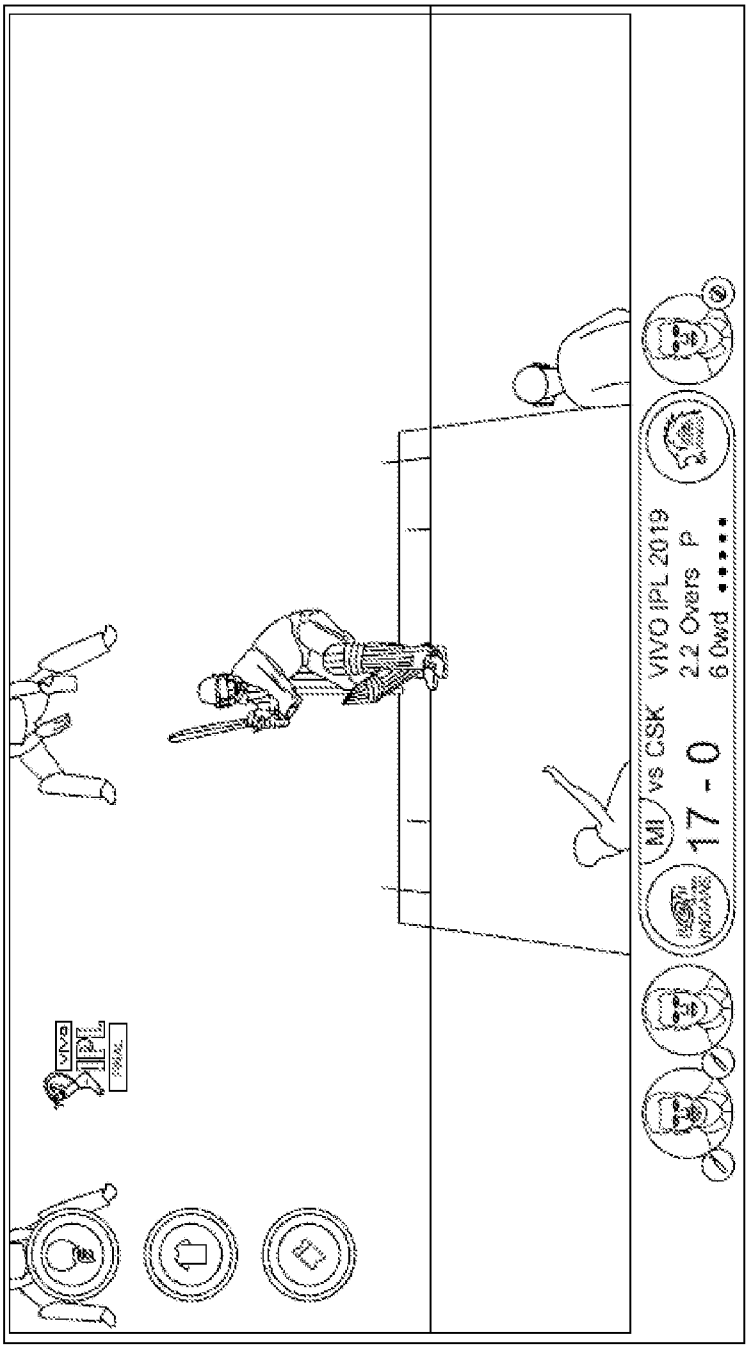

FIG. 7A

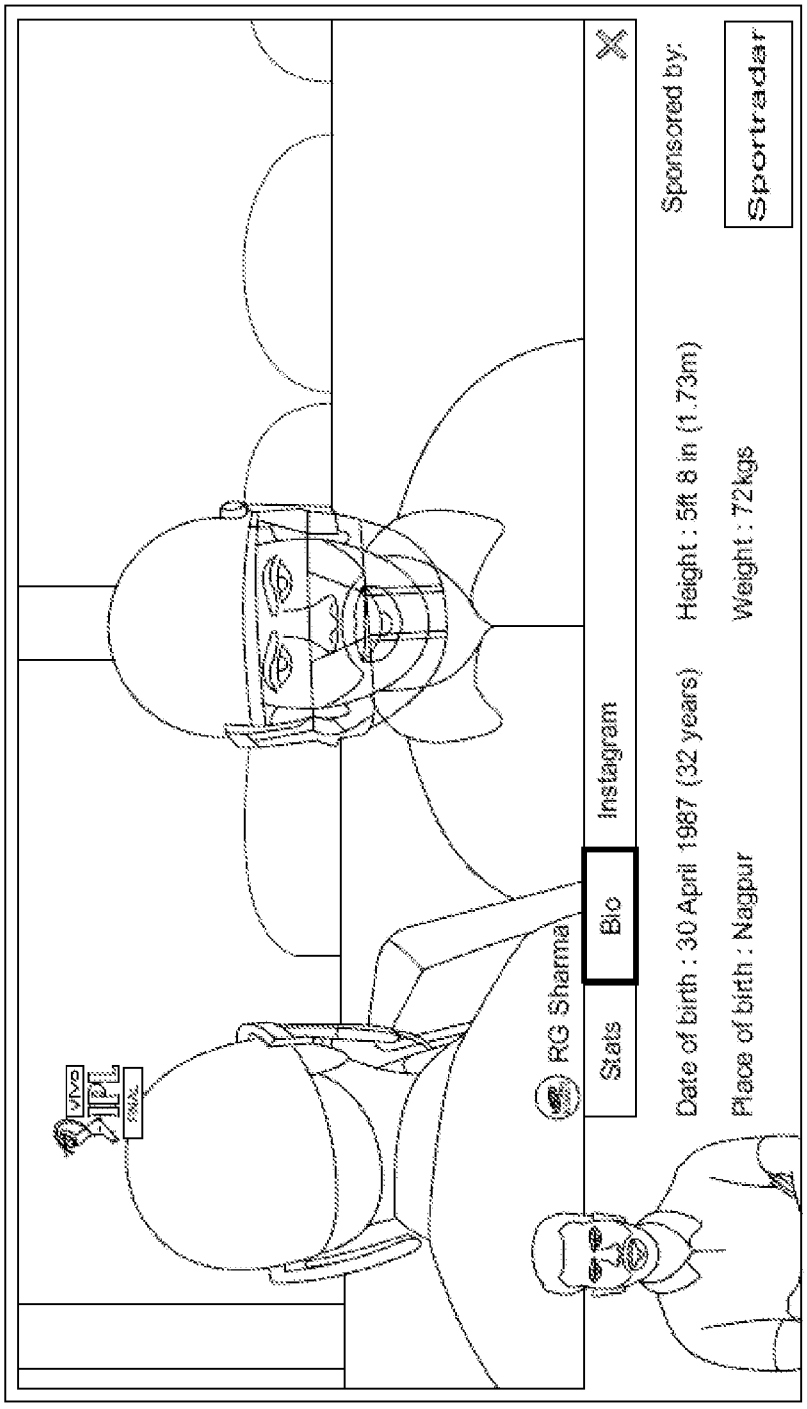
RG Sharma
Stats
Bio
Instagram
Date of birth : 30 April 1987 (32 years)
Height : 5ft 8 in (1.73m)
Place of birth : Nagpur
Weight : 72kgs
Sponsored by:
Sportradar

FIG. 7B

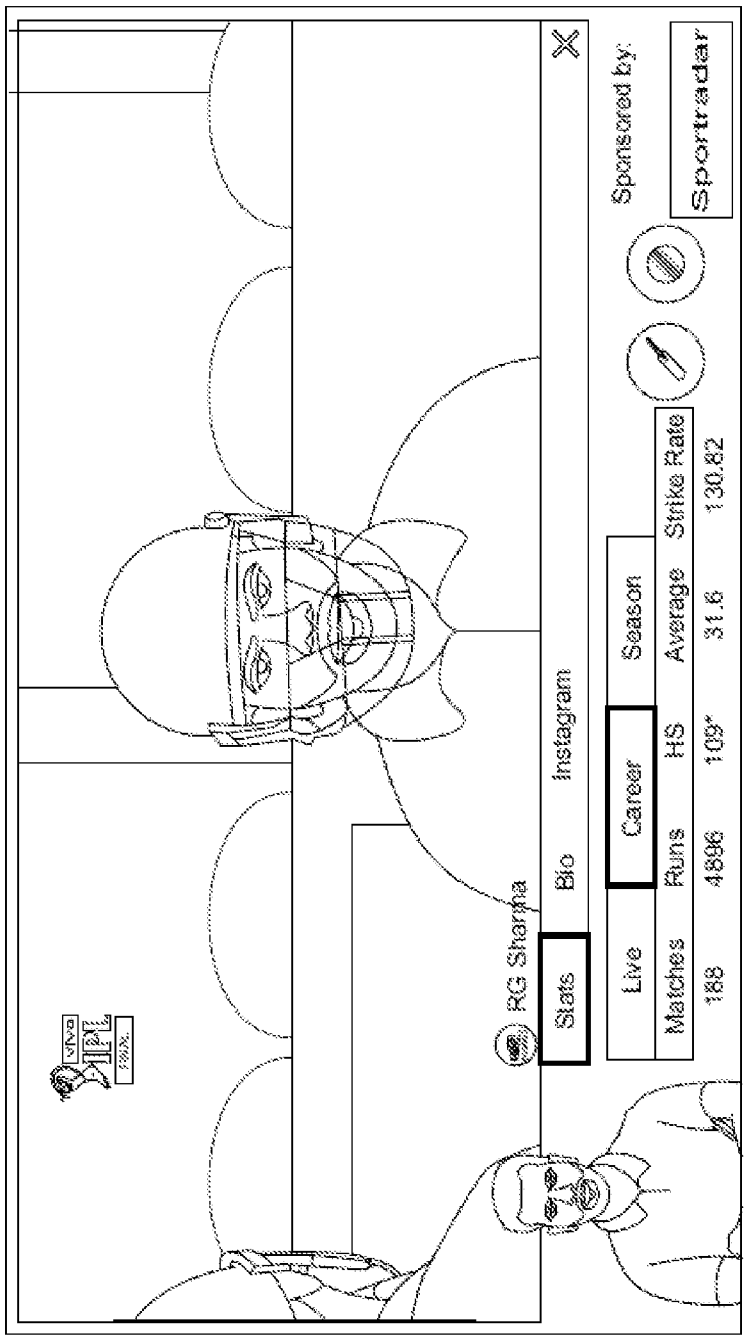
RG Sharma
Stats
Bio
Instagram
Live
Career
Season
Matches
Runs
HS
Average
Strike Rate
188
4896
109*
31.6
130.82
Sponsored by:
Sportradar

FIG. 7C

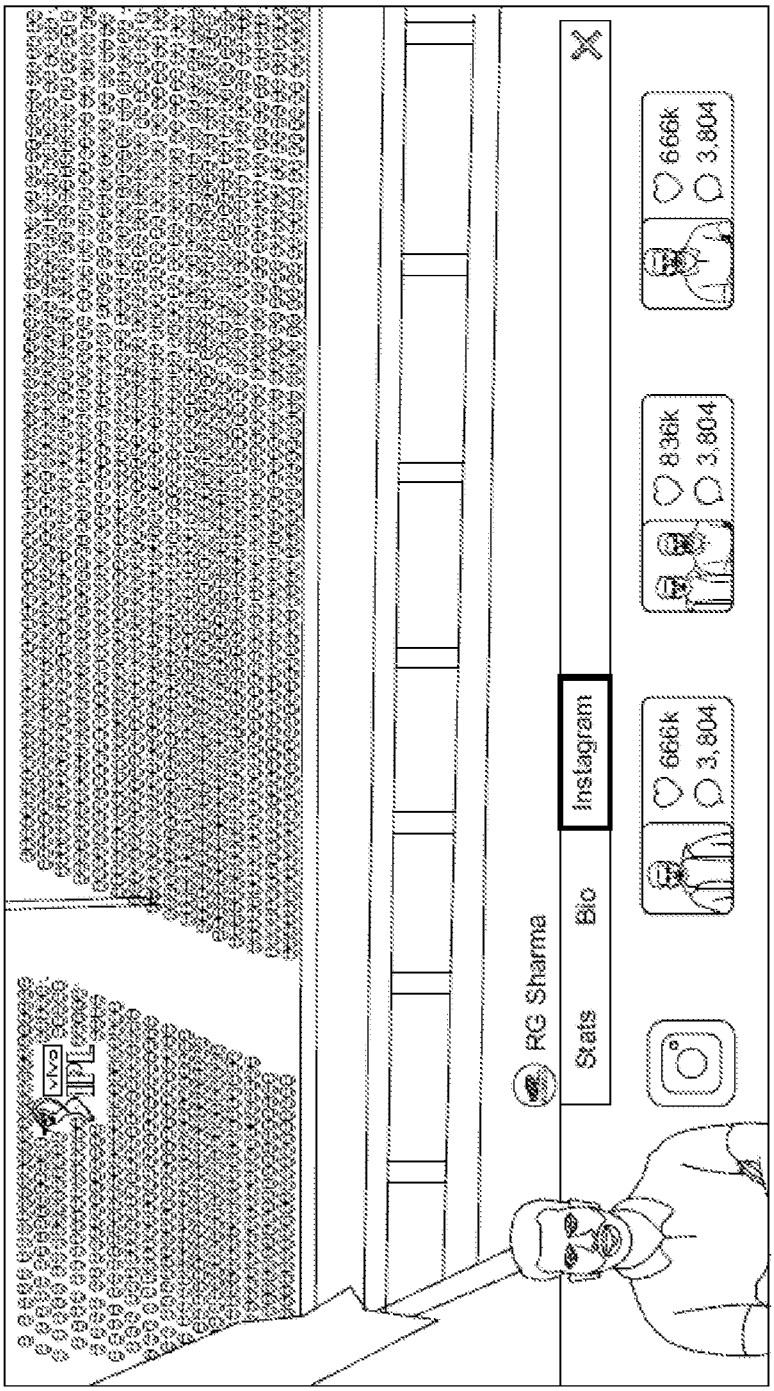

FIG. 7D

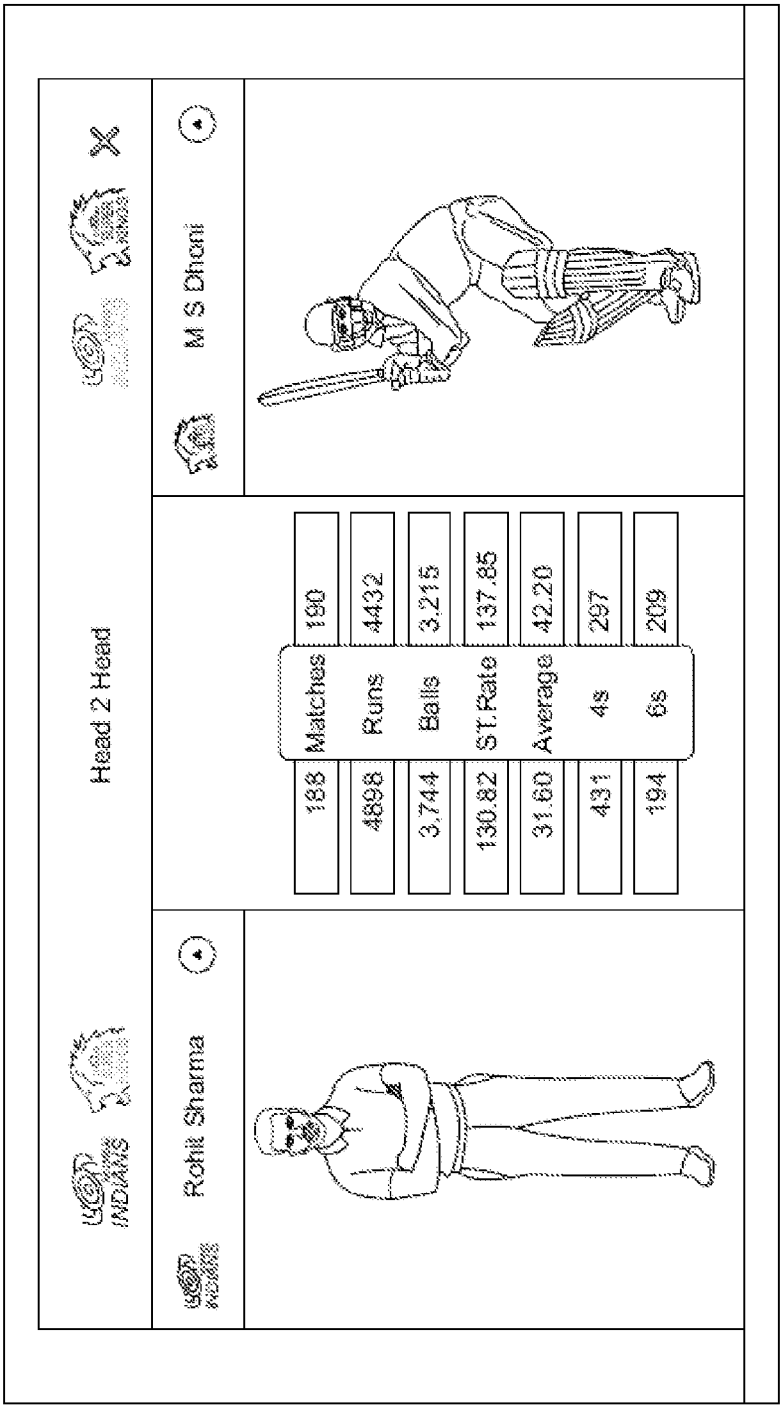
Head 2 Head
Rohit Sharma
M S Dhoni
Matches 190
Runs 4432
Balls 3,215
St.Rate 137.85
Average 42.20
4s 297
6s 209
188
4898
3,744
130.82
31.60
431
194

FIG. 8

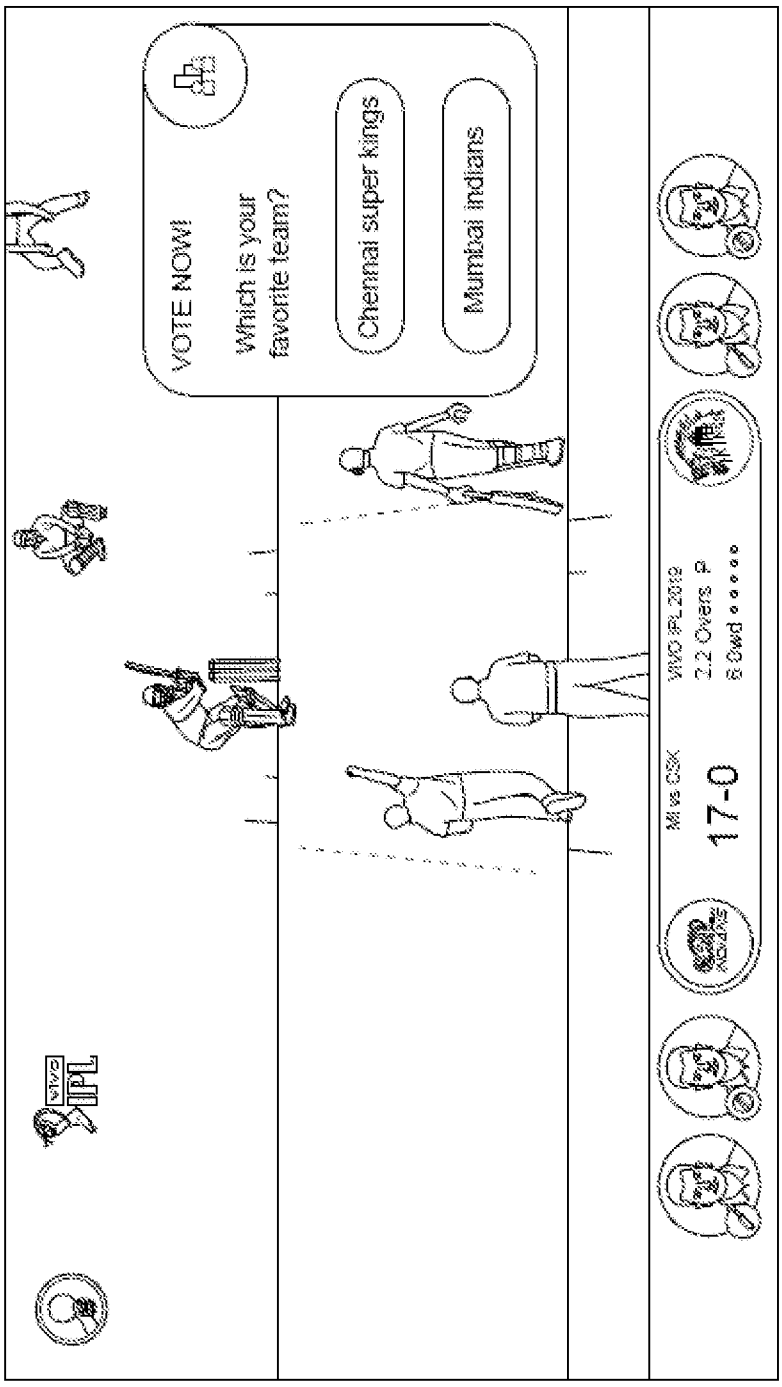
VOTE NOW!!
Which is your favorite team?
Chennai super kings
Mumbai indians
MI vs CSK
17-0
VIVO IPL 2018
2.2 Overs @
8 0wd • • • •

FIG. 9A

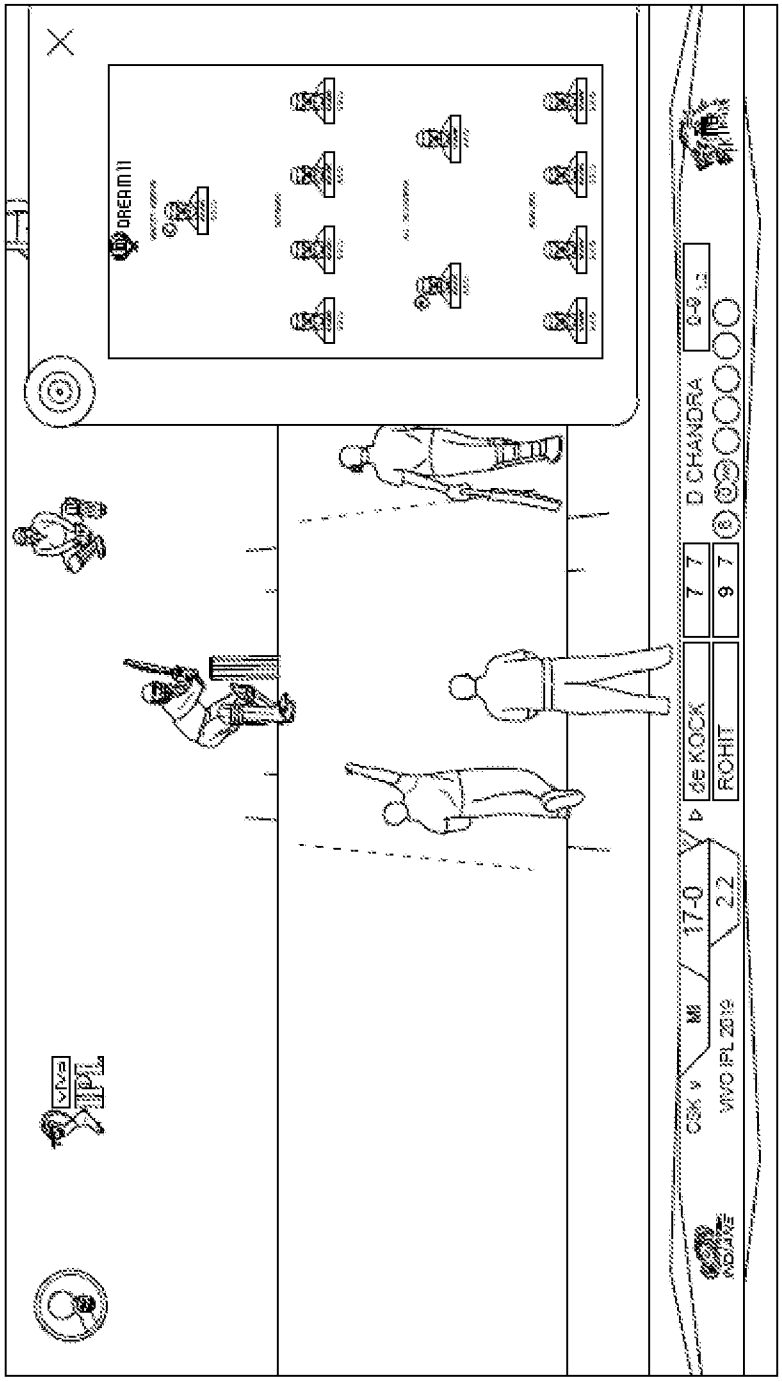

FIG. 9B

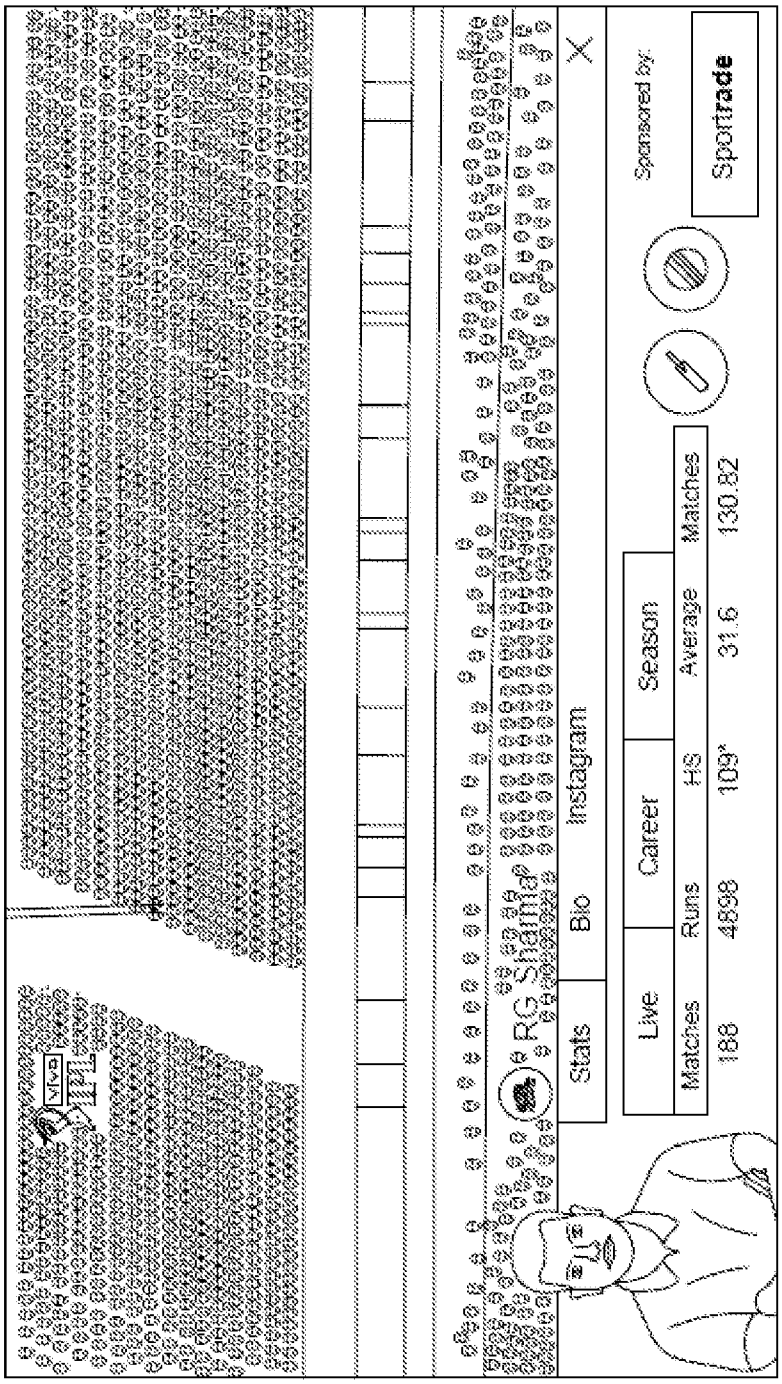
RG Sharma
Stats
Bio
Instagram
Live
Career
Season
Matches
Runs
HS
Average
Matches
188
4898
109*
31.6
130.82
Sponsored by:
Sportrade

FIG. 10A

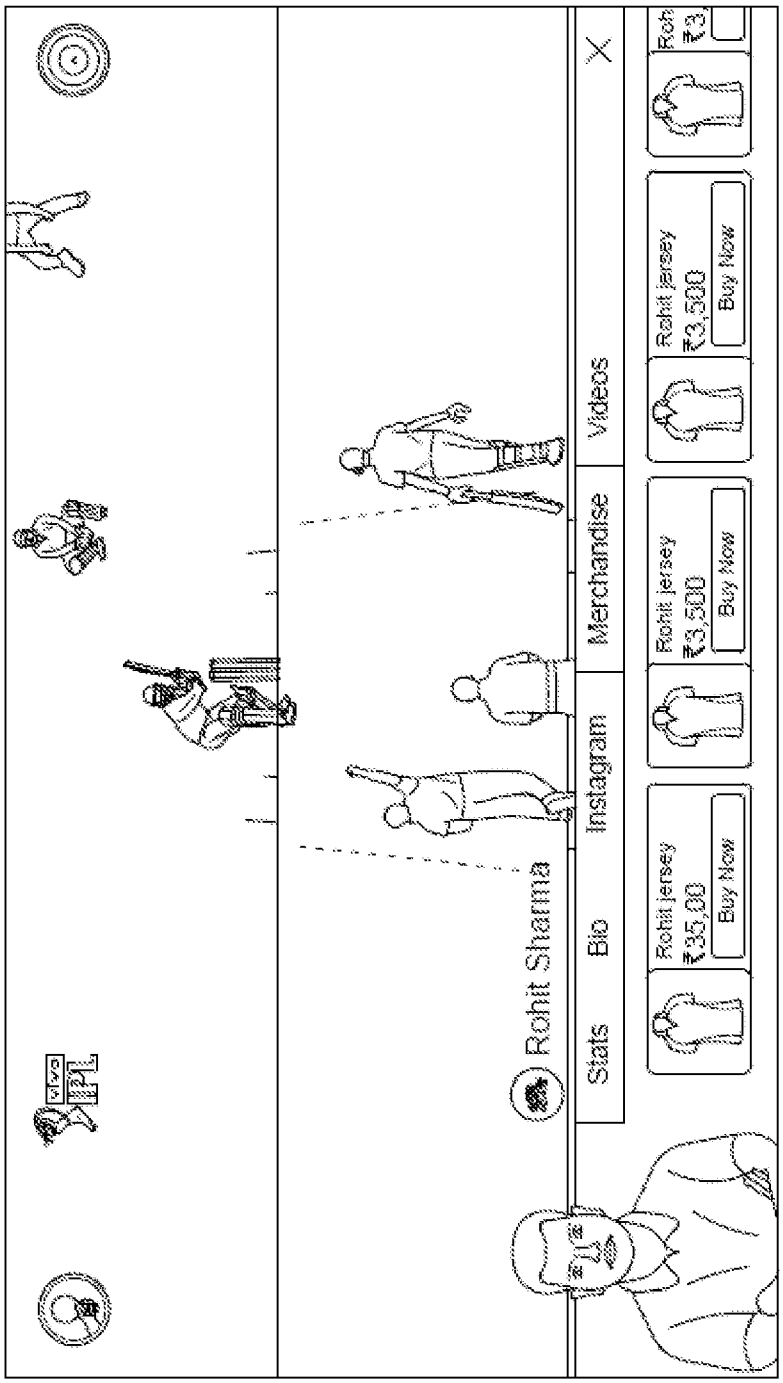
Rohit Sharma
Stats
Bio
Instagram
Merchandise
Videos
Rohit jersey
₹35,00
Buy Now
Rohit jersey
₹3,500
Buy Now
Rohit jersey
₹3,500
Buy Now

FIG. 10B

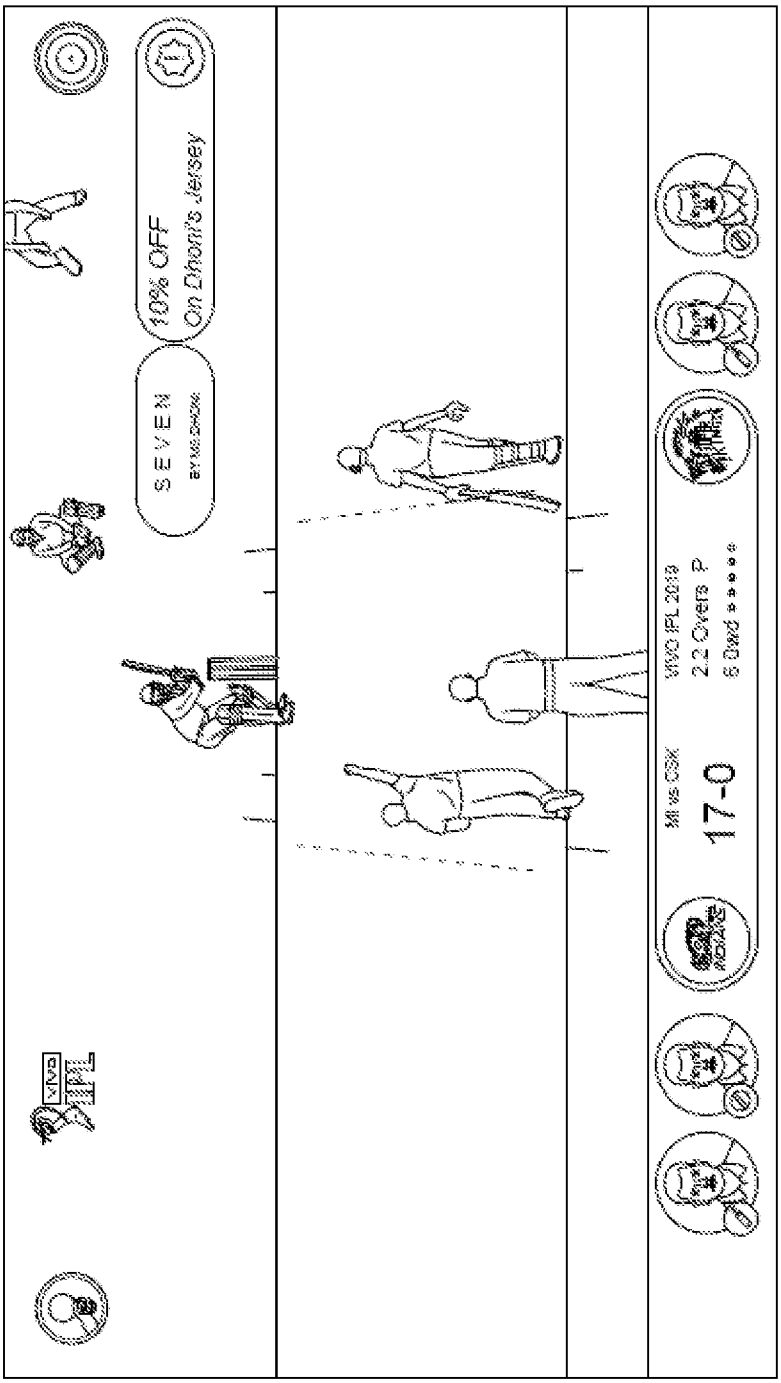
10% OFF
On Dhoni's Jersey
SEVEN
MI vs CSK
17-0
VIVO IPL 2019
2.2 Overs P
6 Dwd

FIG. 10C

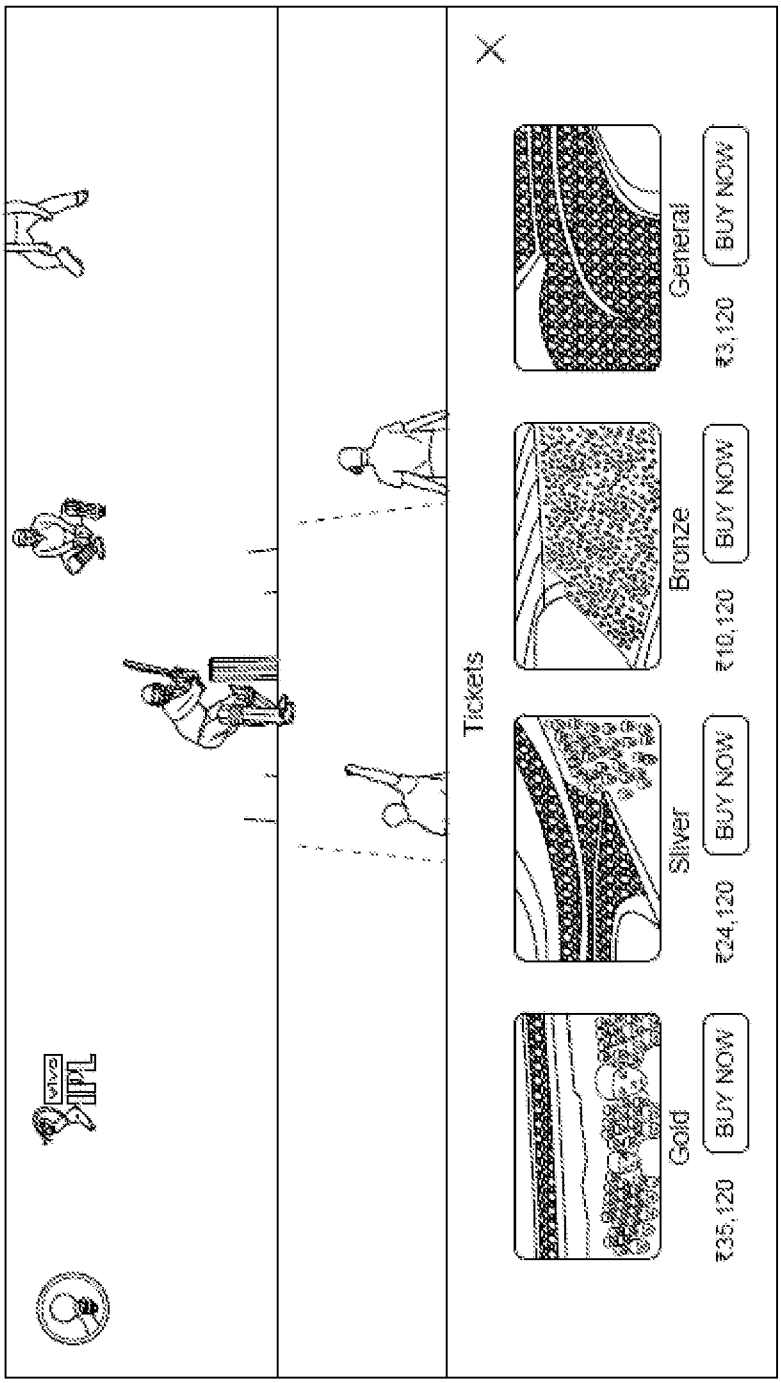
Tickets
Gold
₹35,120
BUY NOW
Silver
₹24,120
BUY NOW
Bronze
₹10,120
BUY NOW
General
₹3,120
BUY NOW

FIG. 10D

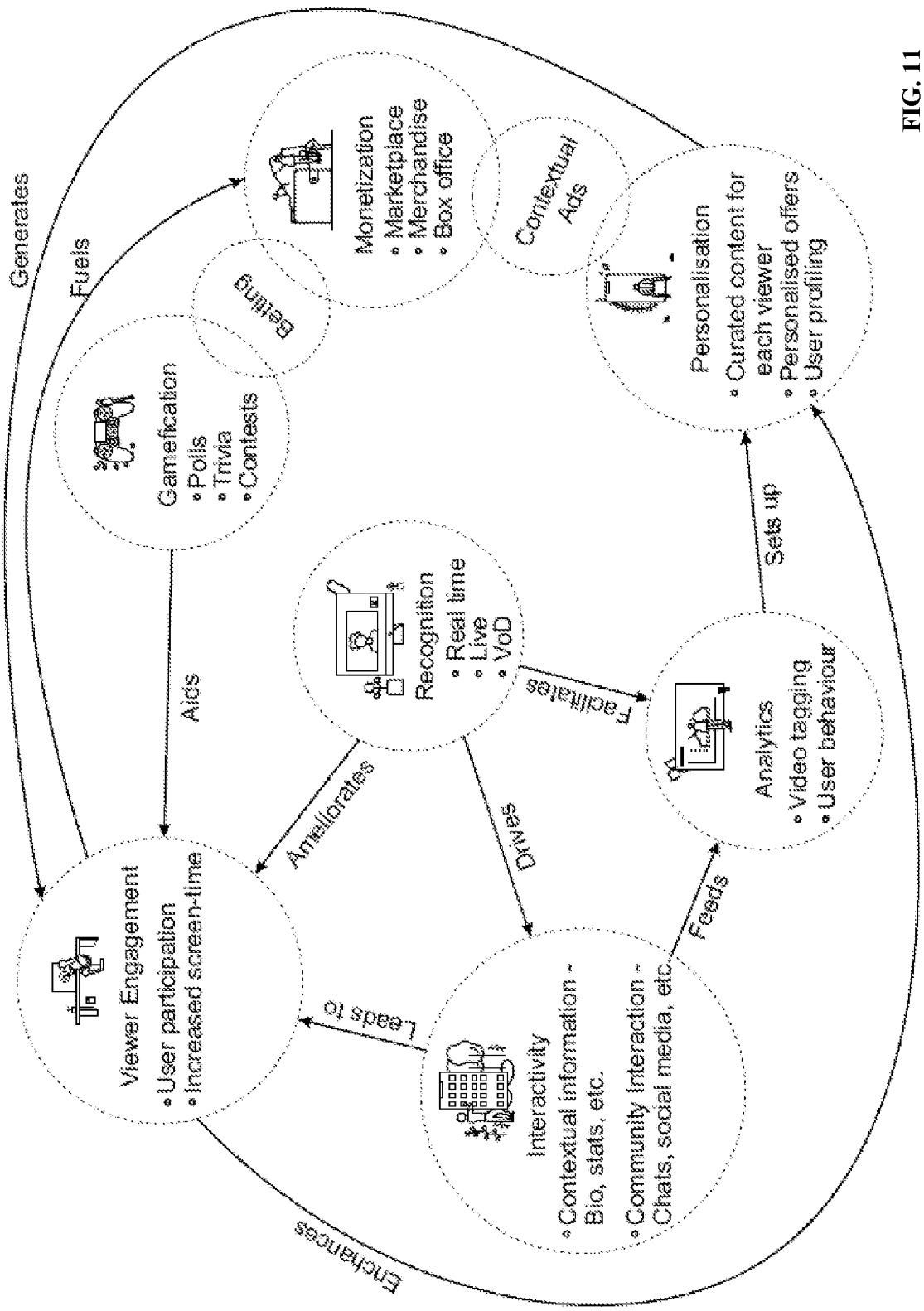
Generates
Fuels
Enchances
Viewer Engagement
• User participation
• Increased screen-time
Gamification
• Polls
• Trivia
• Contests
Betting
Monetization
• Marketplace
• Merchandise
• Box office
Contextual Ads
Personalisation
• Curated content for each viewer
• Personalised offers
• User profiling
Aids
Recognition
• Real time
• Live
• VoD
Facilitates
Sets up
Ameliorates
Drives
Analytics
• Video tagging
• User behaviour
Leads to
Feeds
Interactivity
• Contextual information - Bio, stats, etc.
• Community Interaction - Chats, social media, etc.

FIG. 11