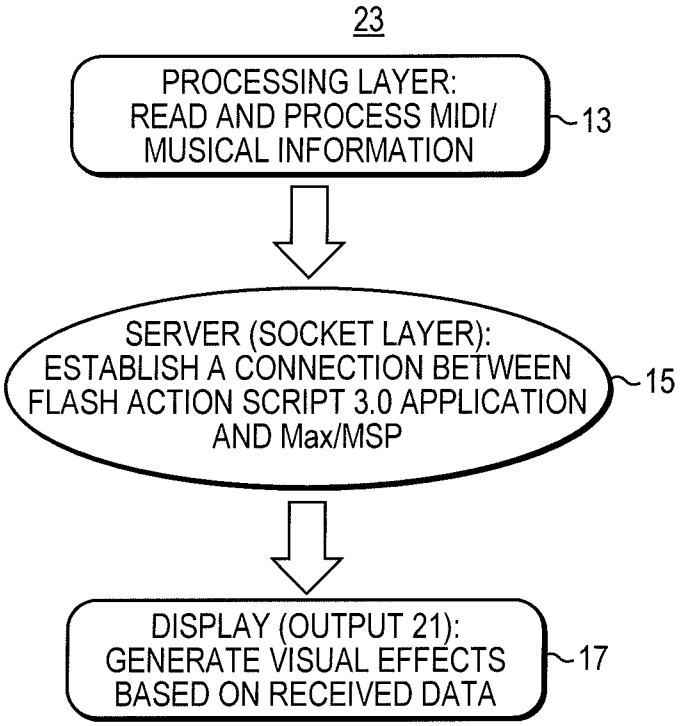

23
PROCESSING LAYER:
READ AND PROCESS MIDI/
MUSICAL INFORMATION
13
SERVER (SOCKET LAYER):
ESTABLISH A CONNECTION BETWEEN
FLASH ACTION SCRIPT 3.0 APPLICATION
AND Max/MSP
15
DISPLAY (OUTPUT 21):
GENERATE VISUAL EFFECTS
BASED ON RECEIVED DATA
17

FIG. 1

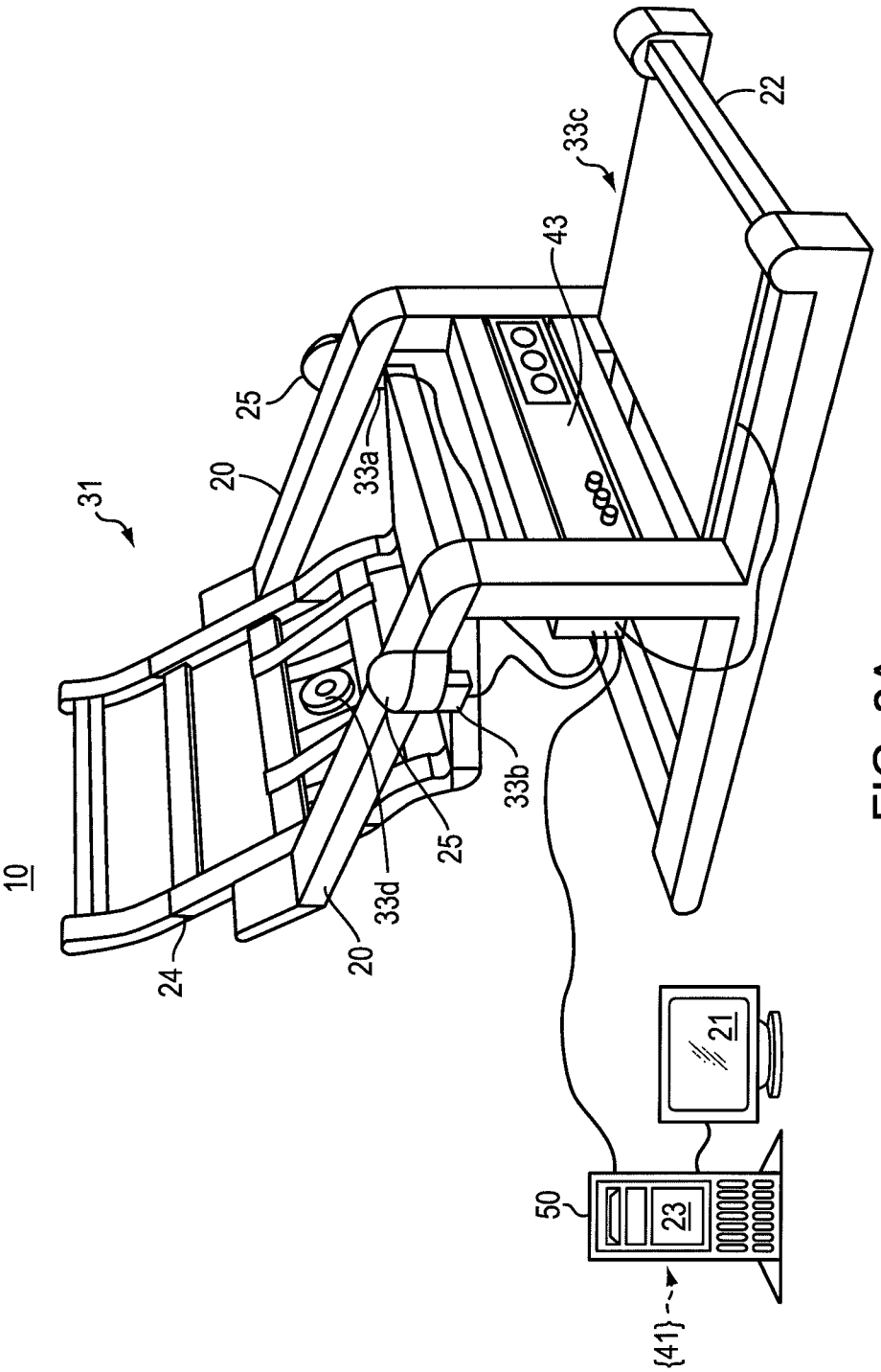


FIG. 2A

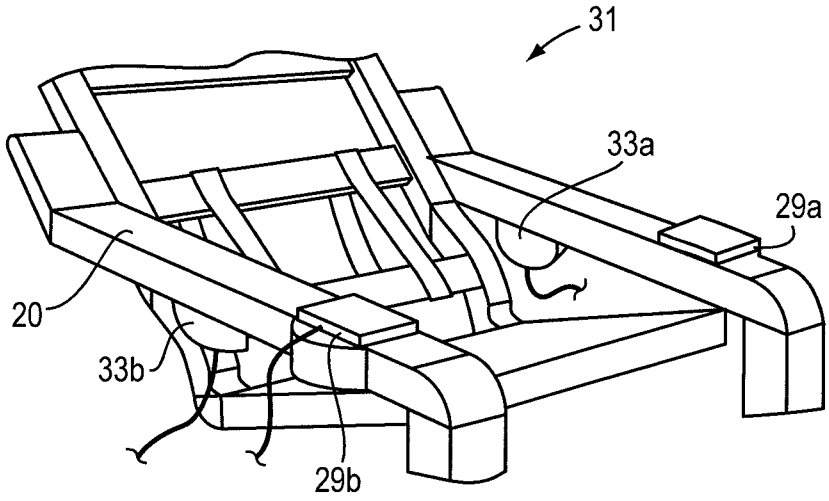


FIG. 2B

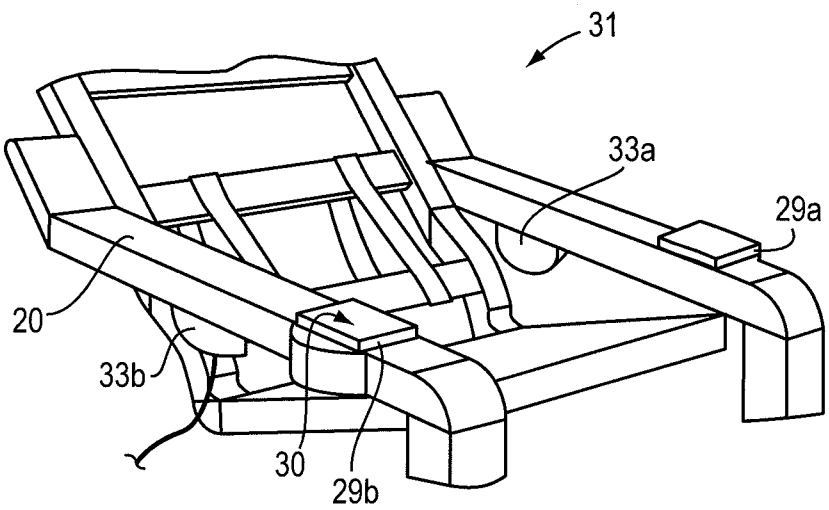


FIG. 2C

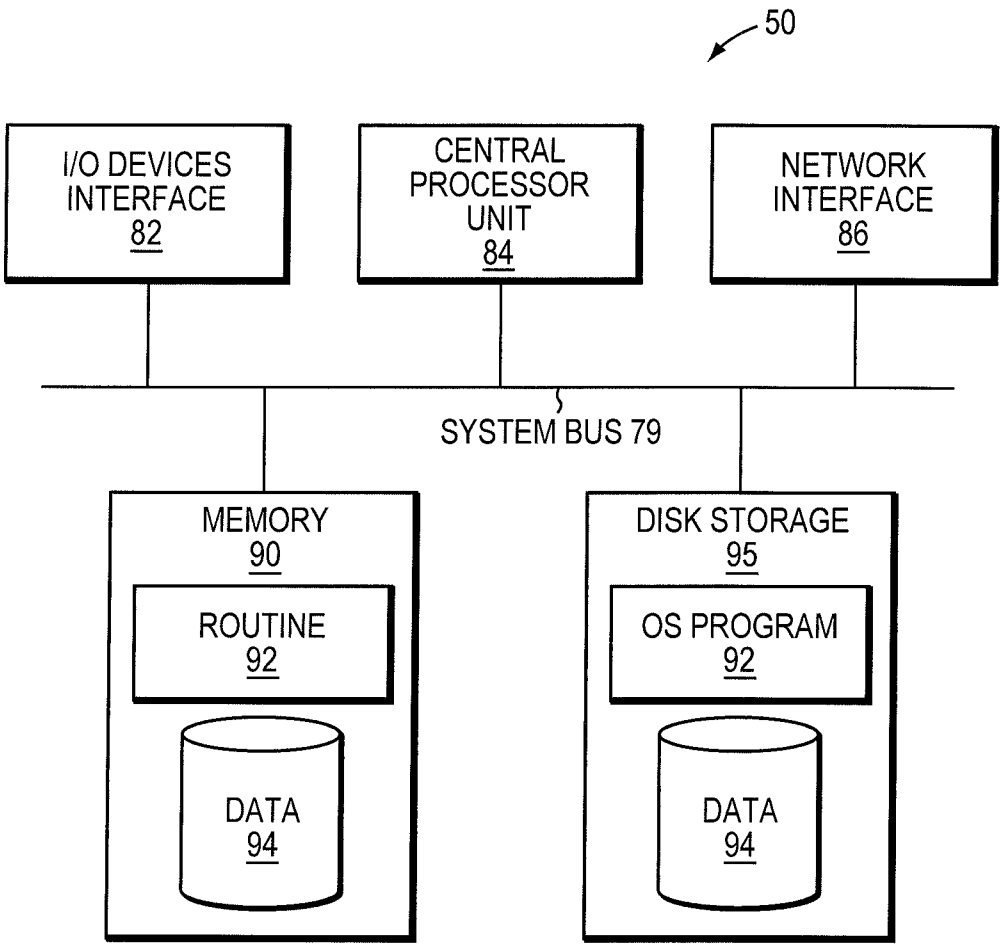

50
I/O DEVICES INTERFACE 82
CENTRAL PROCESSOR UNIT 84
NETWORK INTERFACE 86
SYSTEM BUS 79
MEMORY 90
ROUTINE 92
DATA 94
DISK STORAGE 95
OS PROGRAM 92
DATA 94

FIG. 3

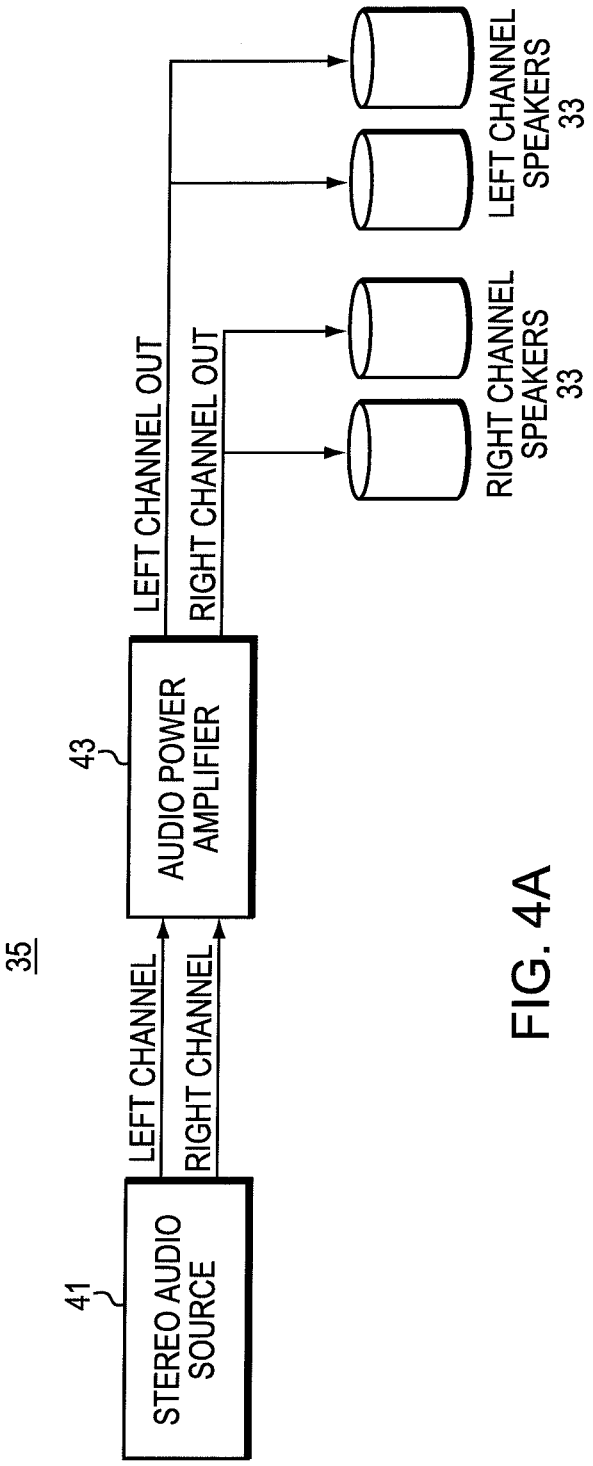

35
41
STEREO AUDIO SOURCE
LEFT CHANNEL
RIGHT CHANNEL
43
AUDIO POWER AMPLIFIER
LEFT CHANNEL OUT
RIGHT CHANNEL OUT
LEFT CHANNEL SPEAKERS 33
RIGHT CHANNEL SPEAKERS 33

FIG. 4A

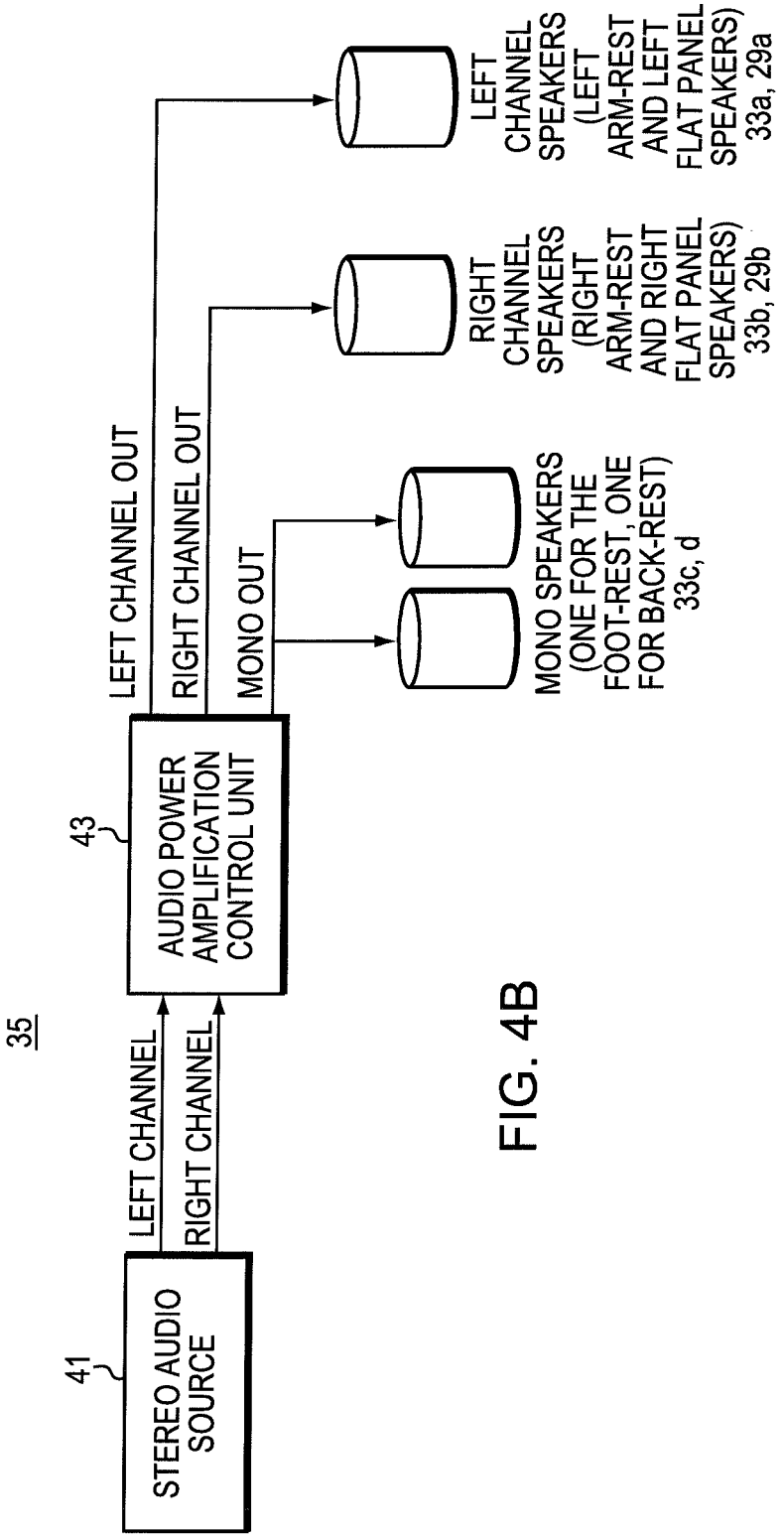
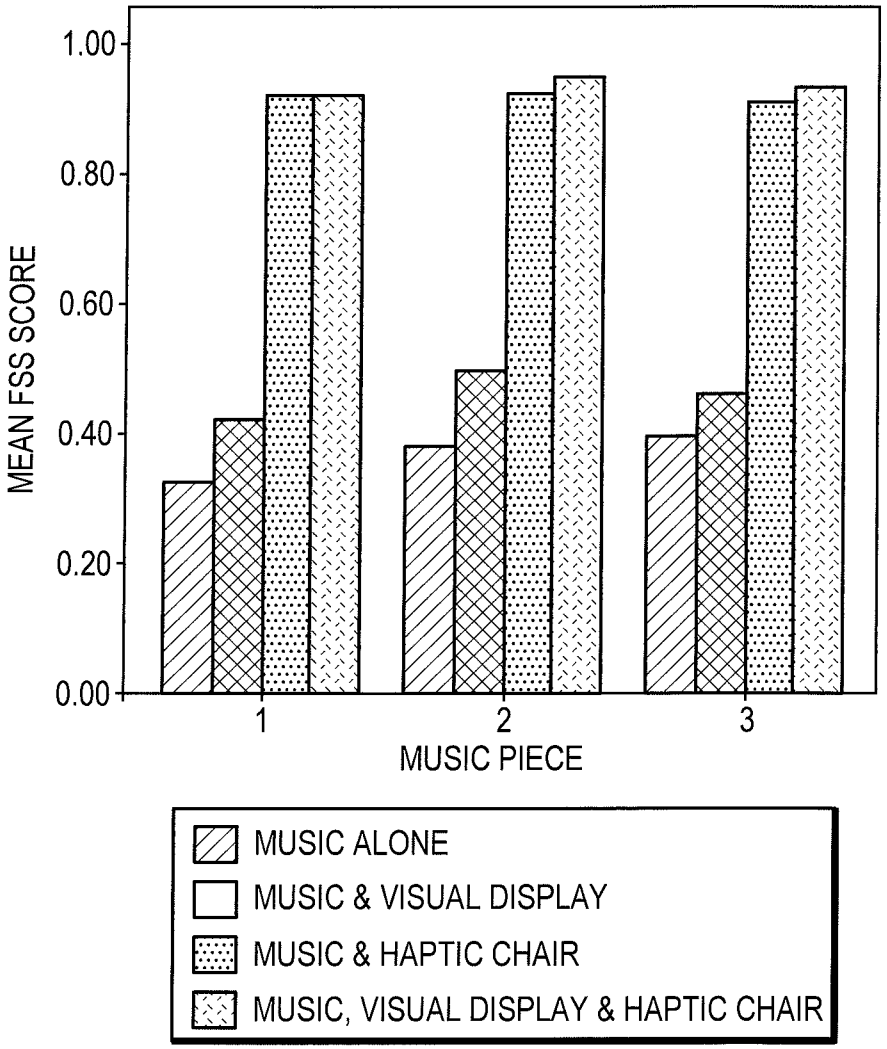
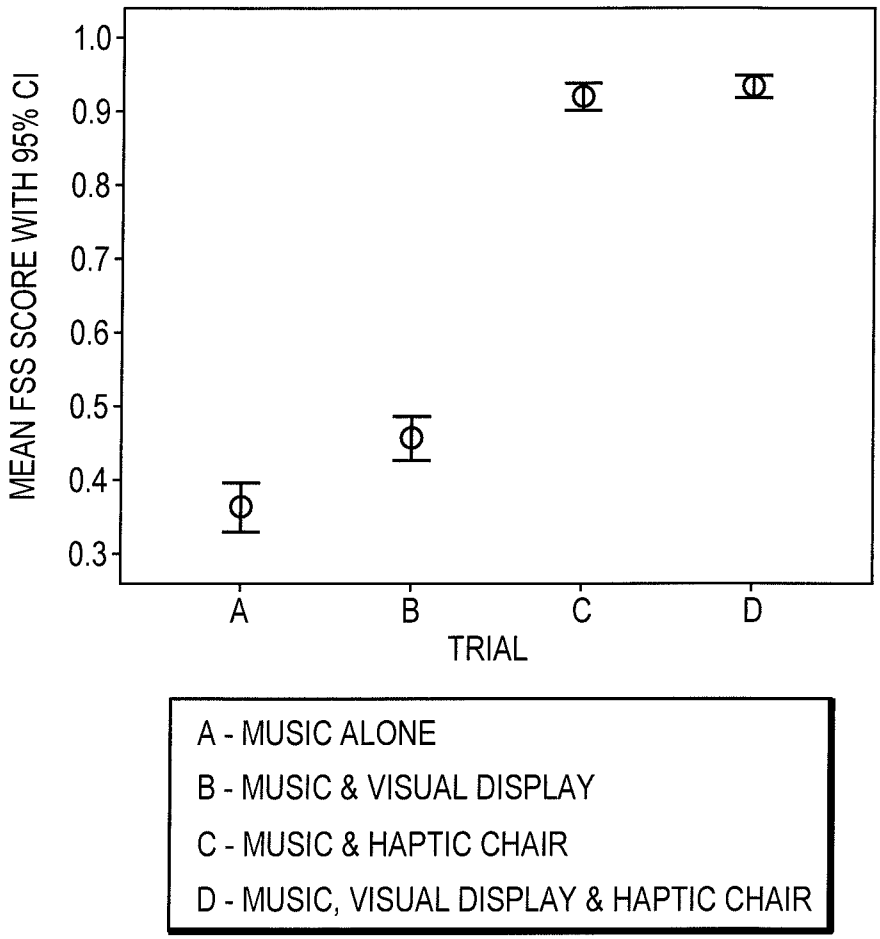

35
41
STEREO AUDIO SOURCE
LEFT CHANNEL
RIGHT CHANNEL
43
AUDIO POWER AMPLIFICATION CONTROL UNIT
LEFT CHANNEL OUT
RIGHT CHANNEL OUT
MONO OUT
LEFT CHANNEL SPEAKERS (LEFT ARM-REST AND LEFT FLAT PANEL SPEAKERS) 33a, 29a
RIGHT CHANNEL SPEAKERS (RIGHT ARM-REST AND RIGHT FLAT PANEL SPEAKERS) 33b, 29b
MONO SPEAKERS (ONE FOR THE FOOT-REST, ONE FOR BACK-REST) 33c, d

FIG. 4B



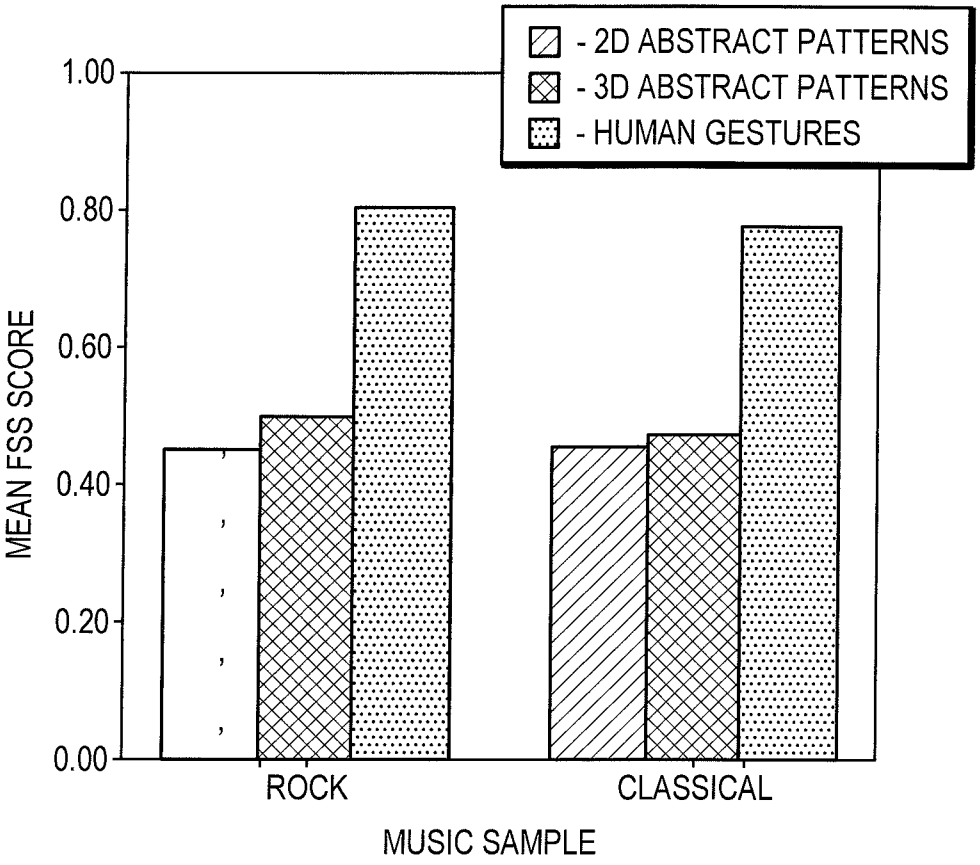
OVERALL FSS SCORE FOR ALL EXPERIMENTAL CONDITIONS

FIG. 5



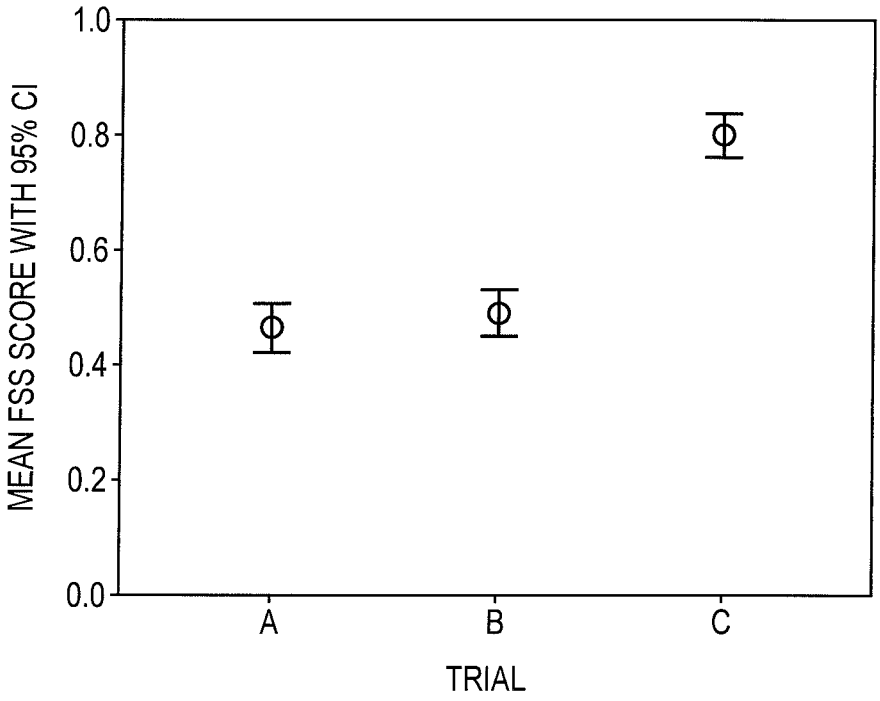
PLOT OF FSS SCORE WITH 95% CONFIDENCE INTERVAL (CI) FOR FOUR DIFFERENT COMBINATIONS

FIG. 6



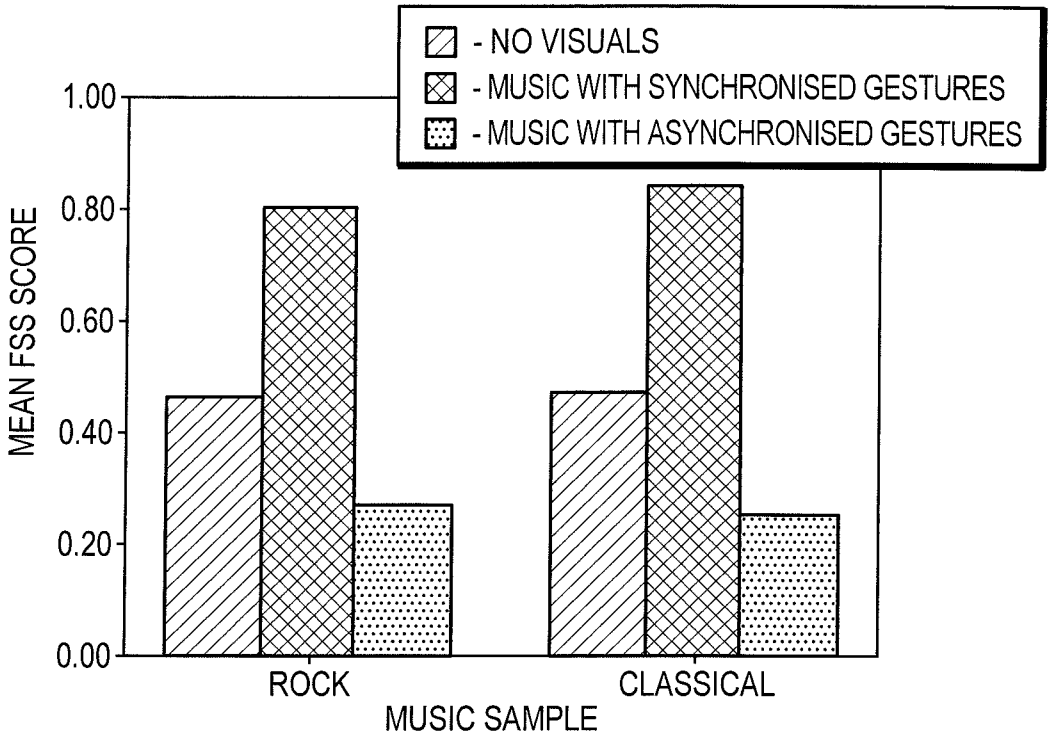
OVERALL FSS SCORE FOR ALL EXPERIMENTAL CONDITIONS,

FIG. 7



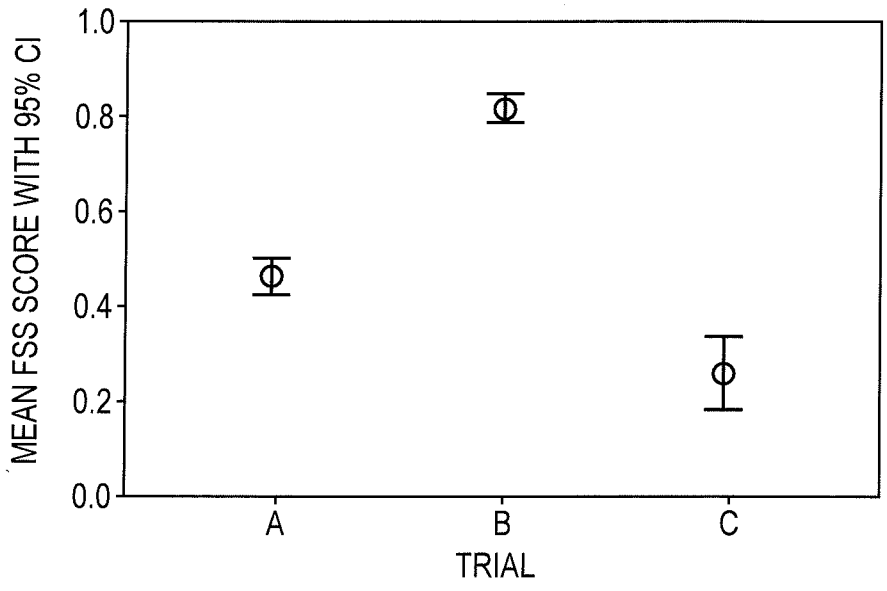
PLOT OF MEAN FSS SCORE WITH 95% CONFIDENCE INTERVAL (CI) FOR THREE DIFFERENT COMBINATIONS (A - 2D ABSTRACT PATTERNS, B - 2D ABSTRACT PATTERNS, C - HUMAN GESTURES)

FIG. 8



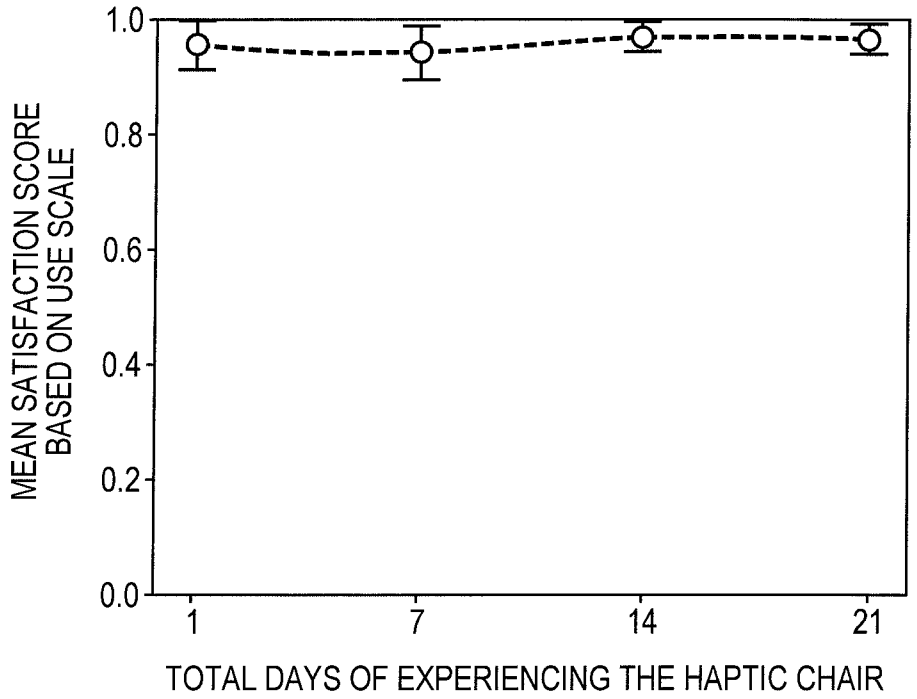
OVERALL FSS SCORE FOR ALL EXPERIMENTAL CONDITIONS

FIG. 9



PLOT OF MEAN FSS SCORE WITH 95% CONFIDENCE INTERVAL (CI) FOR THREE DIFFERENT COMBINATIONS (A - NO VISUALS, B - MUSIC WITH SYNCHRONISED GESTURES, C - MUSIC WITH ASYNCHRONISED GESTURES)

FIG. 10



MEAN USE SCORE OF SATISFACTION MONITORED FROM
SIX PARTICIPANTS OVER A PERIOD OF THREE WEEKS.
(BARS AT EACH DATA POINT SHOWS THE 95% CONFIDENCE INTERVALS)

FIG. 11