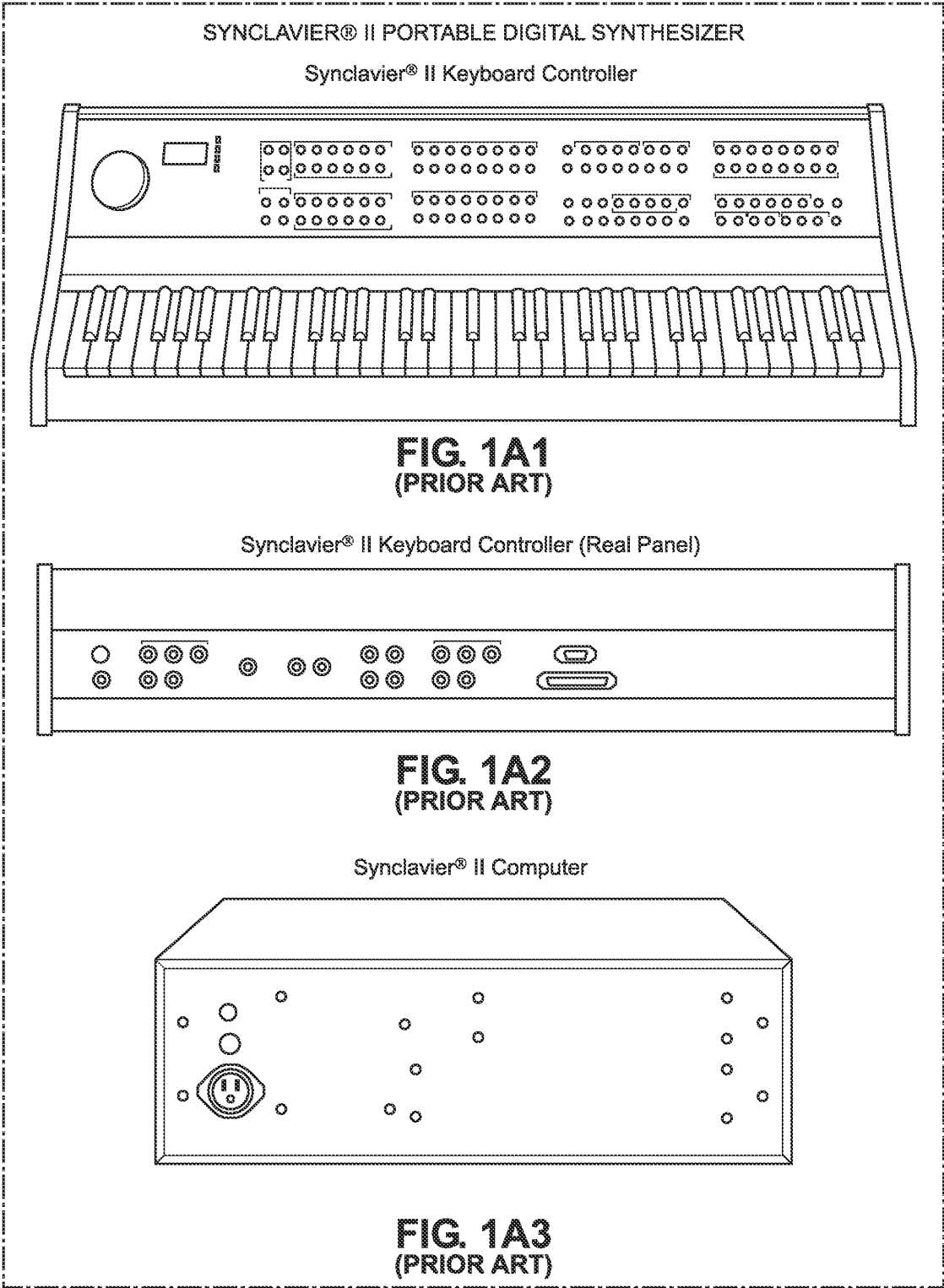




SYNCLAVIER® II DIGITAL SYNTHESIZER



FIG. 1A4
(PRIOR ART)

SYNCLAVIER® 3200 DIGITAL AUDIO STUDIO

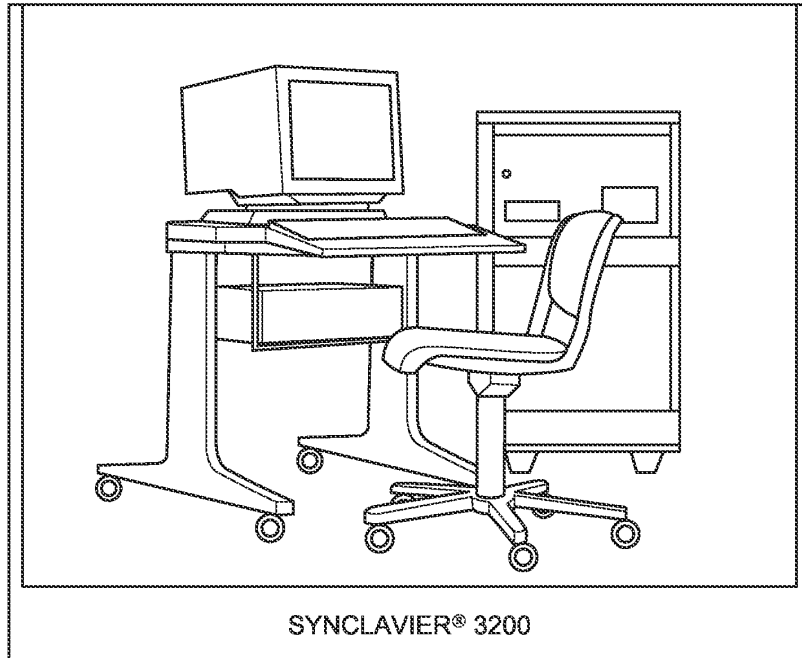


FIG. 1B
(PRIOR ART)

SYNCLAVIER® 9600 DIGITAL AUDIO STUDIO

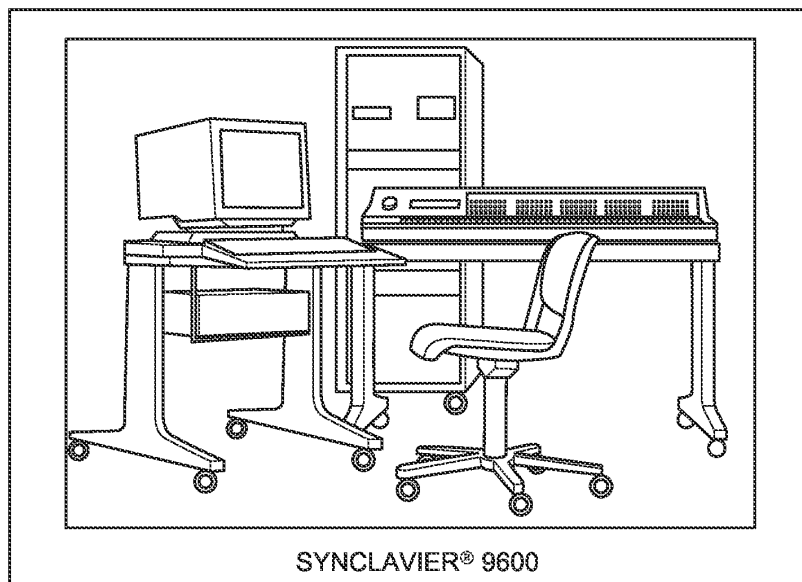
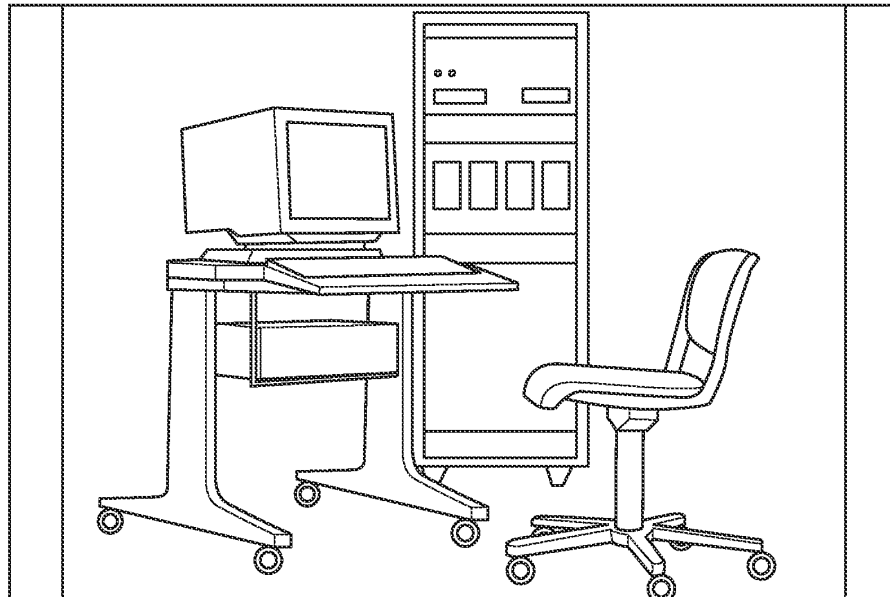


FIG. 1C
(PRIOR ART)

SYNCLAVIER® DIRECT-TO-DISC DIGITAL AUDIO SYSTEM

The Synclavier Direct-To-Disk System
(And yes, we did invent and register the name 'Direct-To-Disk' in 1984)

FIG. 1D
(PRIOR ART)

SYNCLAVIER® DIGITAL TAPELESS STUDIO SYSTEM

The Ultimate Synclavier® Tapeless Studio

FIG. 1E
(PRIOR ART)

SYNCLAVIER® POSTPRO DIGITAL AUDIO SYSTEM

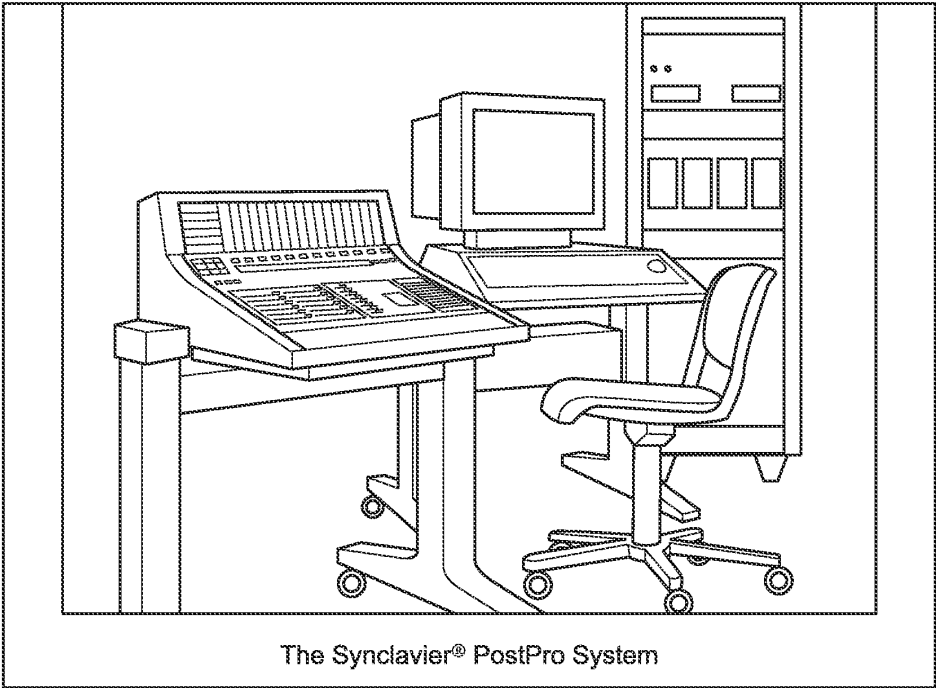


FIG. 1F
(PRIOR ART)

SYNCLAVIER® DIGITAL AUDIO STUDIO FAMILY



FIG. 1G
(PRIOR ART)

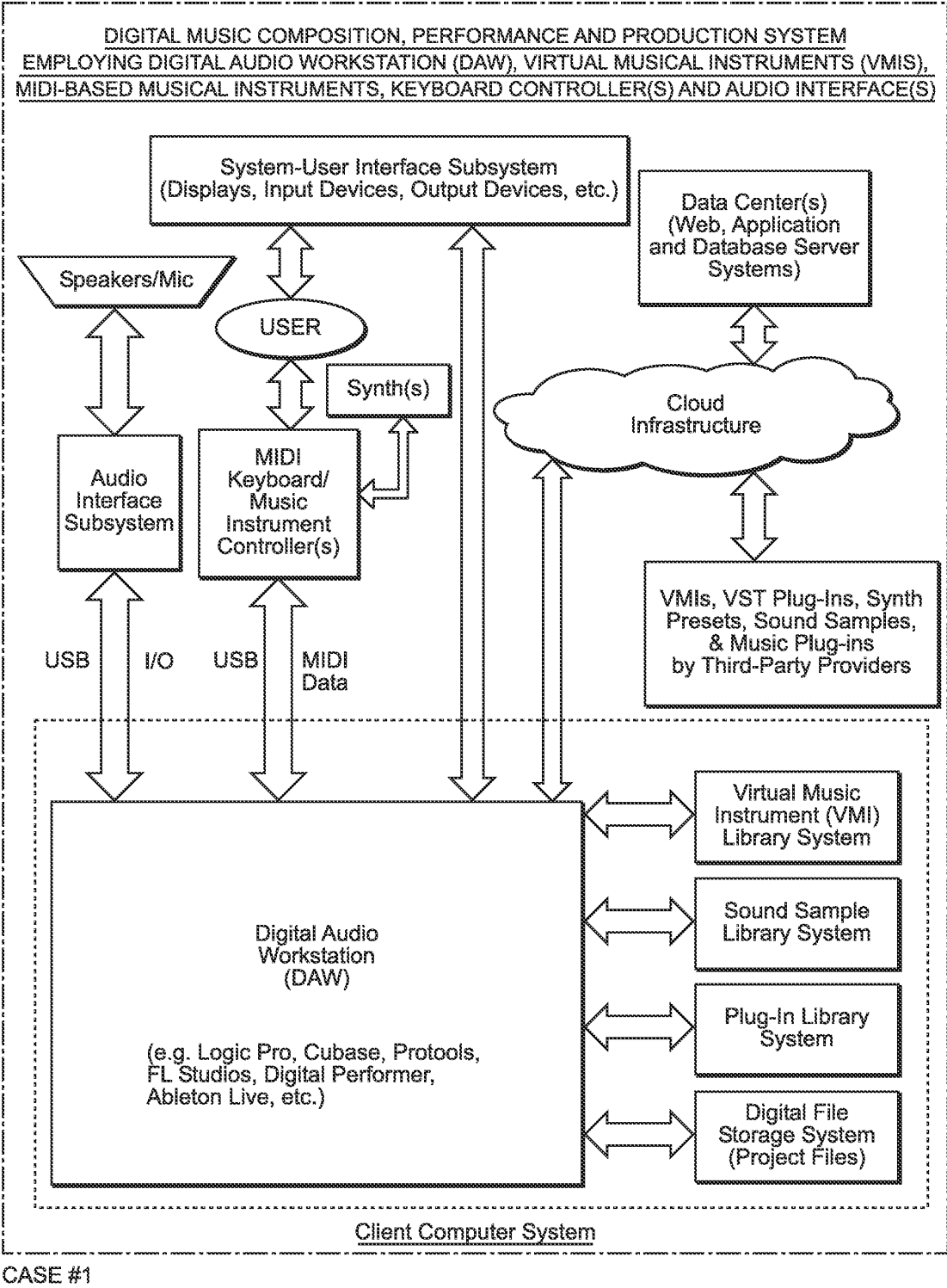


FIG. 2
(PRIOR ART)

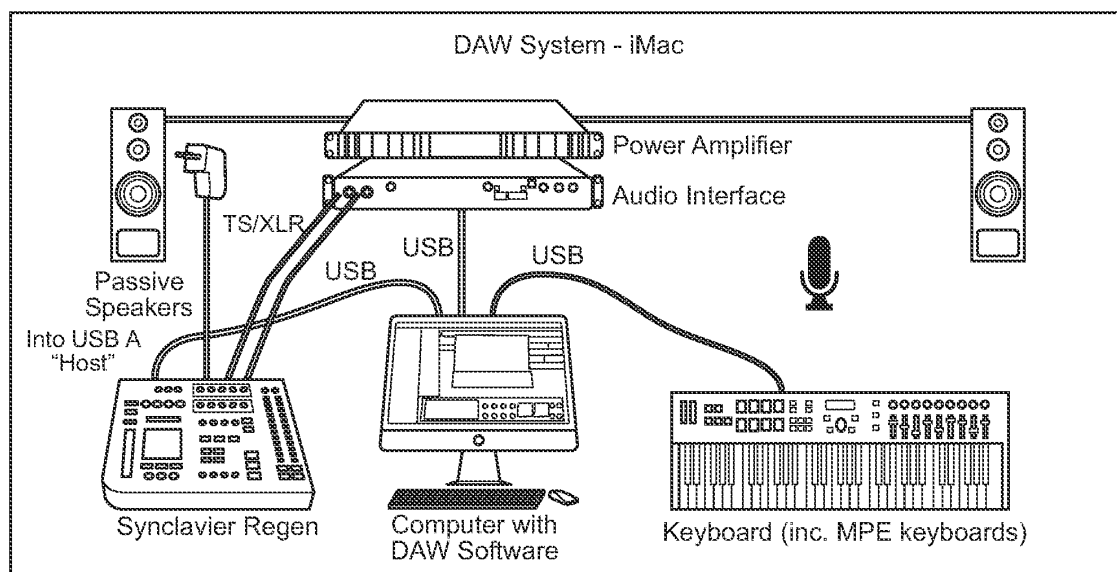


FIG. 2A
(PRIOR ART)

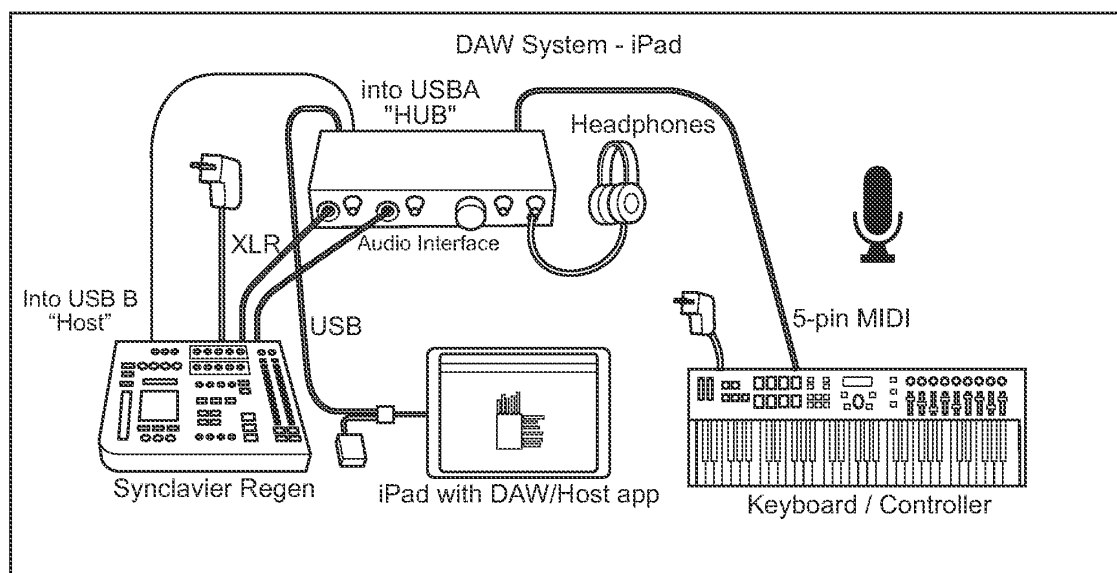


FIG. 2B
(PRIOR ART)

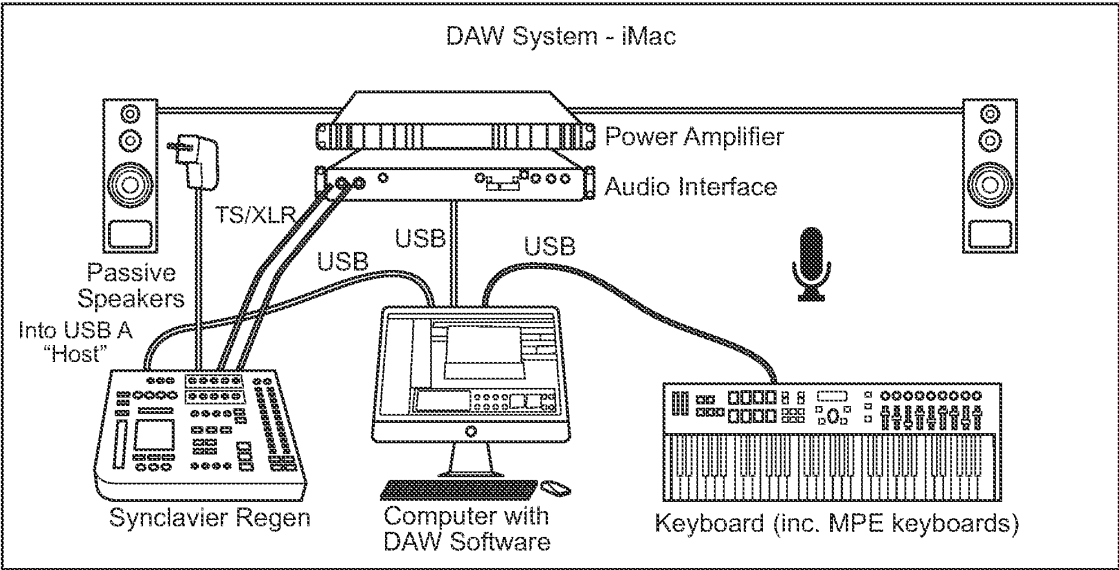


FIG. 2C1
(PRIOR ART)

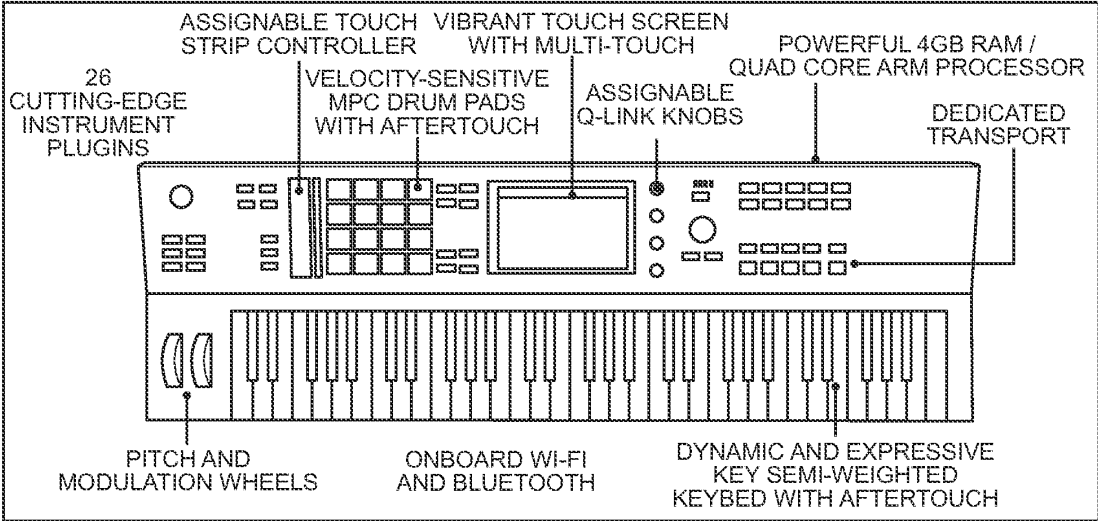


FIG. 2C2
(PRIOR ART)

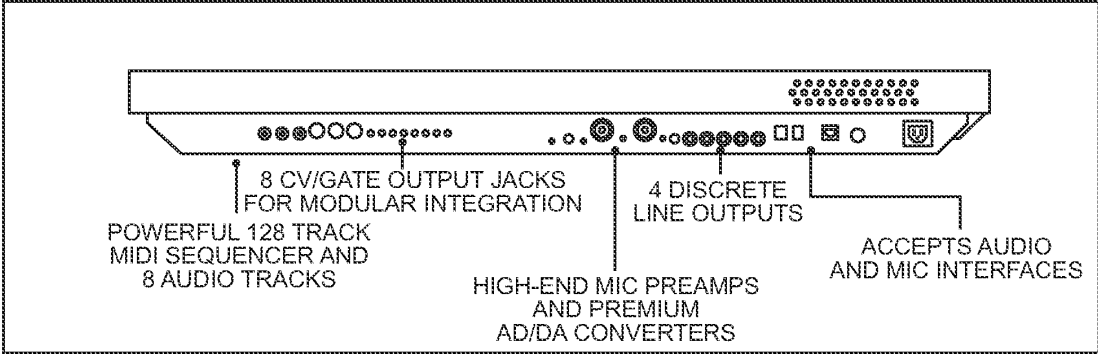
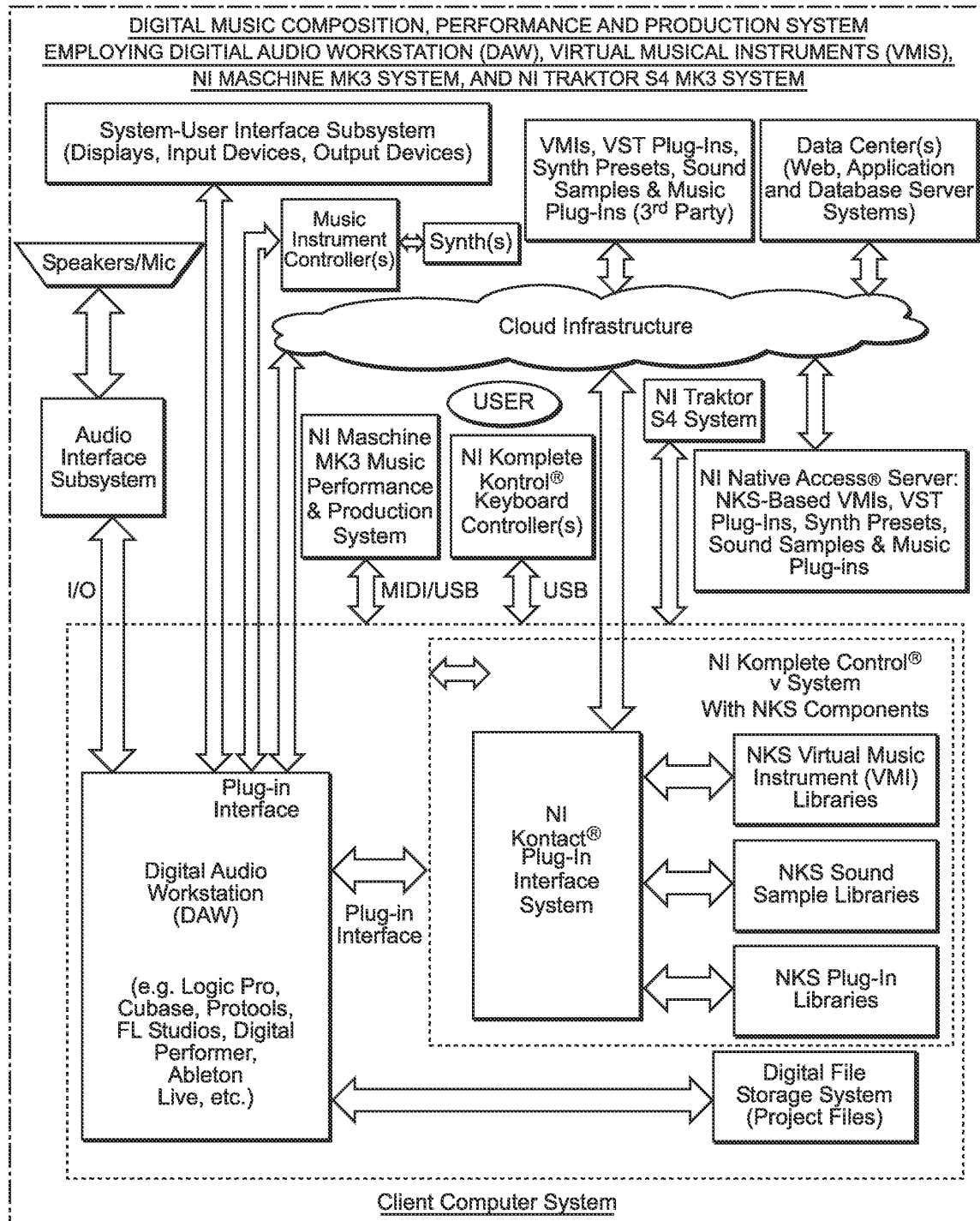


FIG. 2C3
(PRIOR ART)



CASE #2

MI Maschine MK3
MI Traktor S4 MK3

FIG. 3
(PRIOR ART)

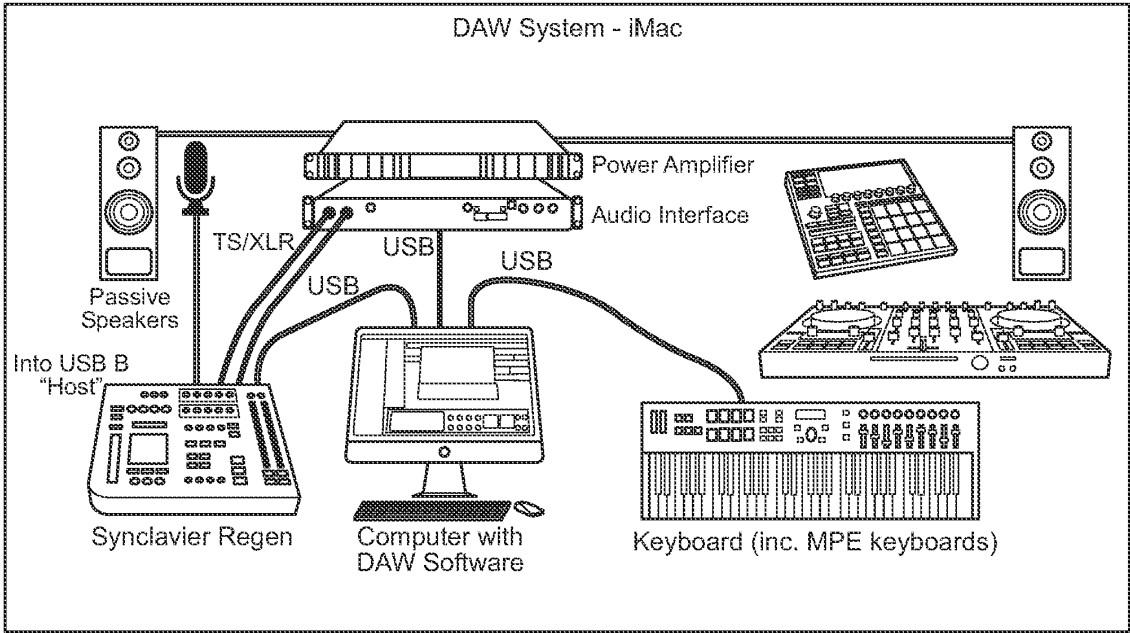


FIG. 3A
(PRIOR ART)

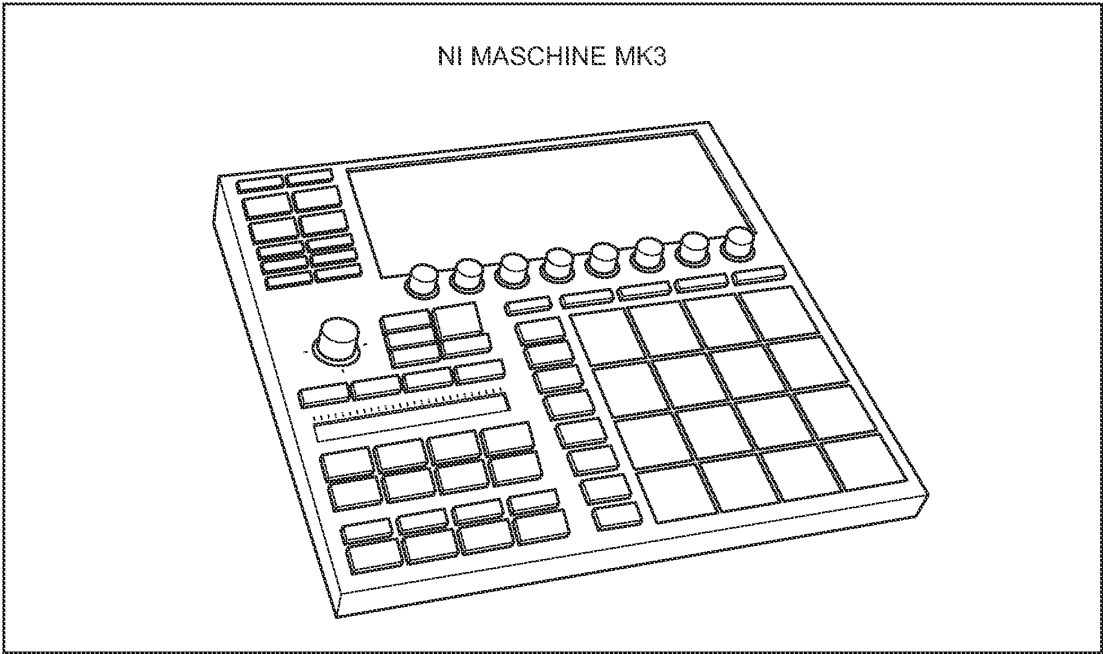
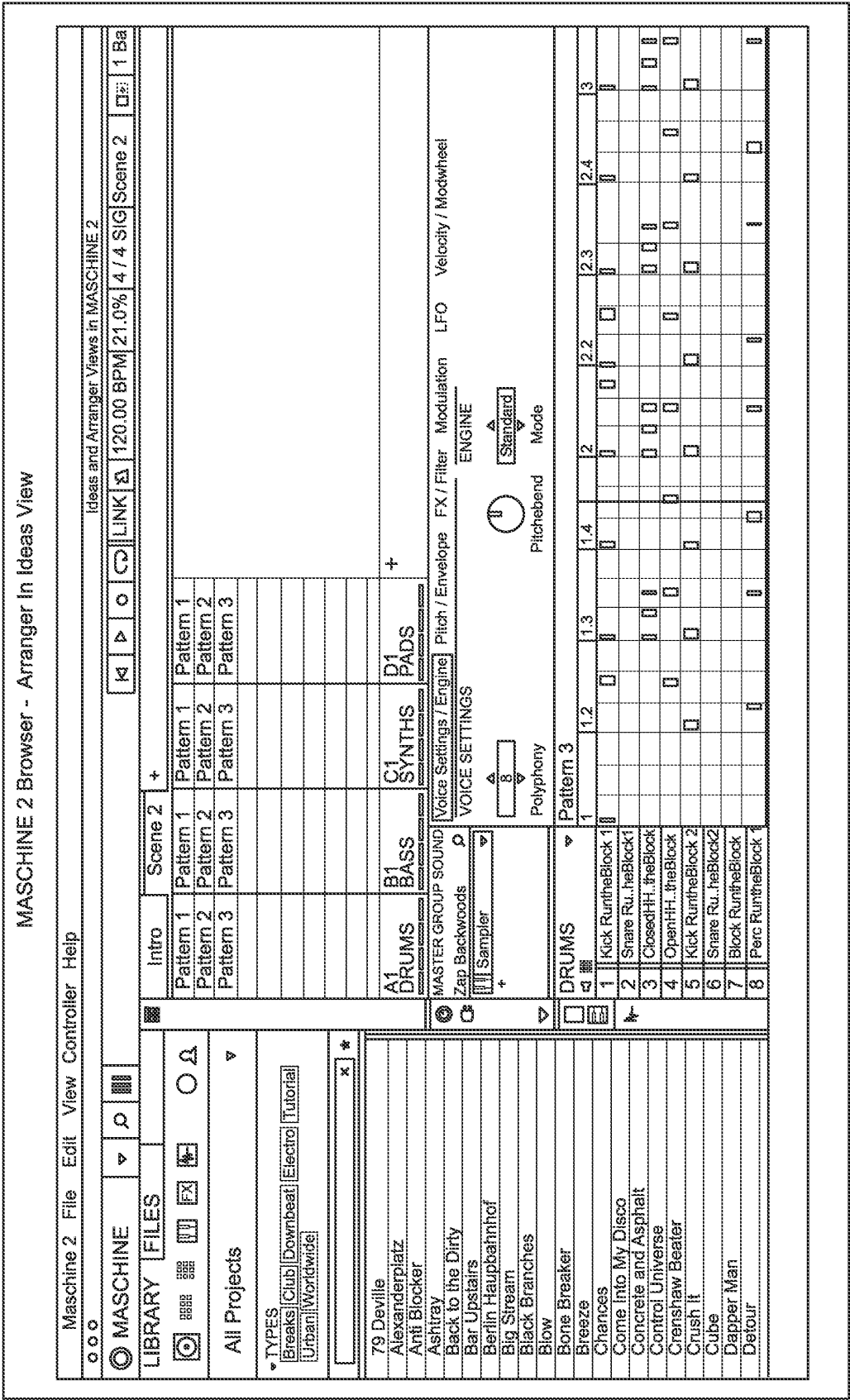


FIG. 3B
(PRIOR ART)



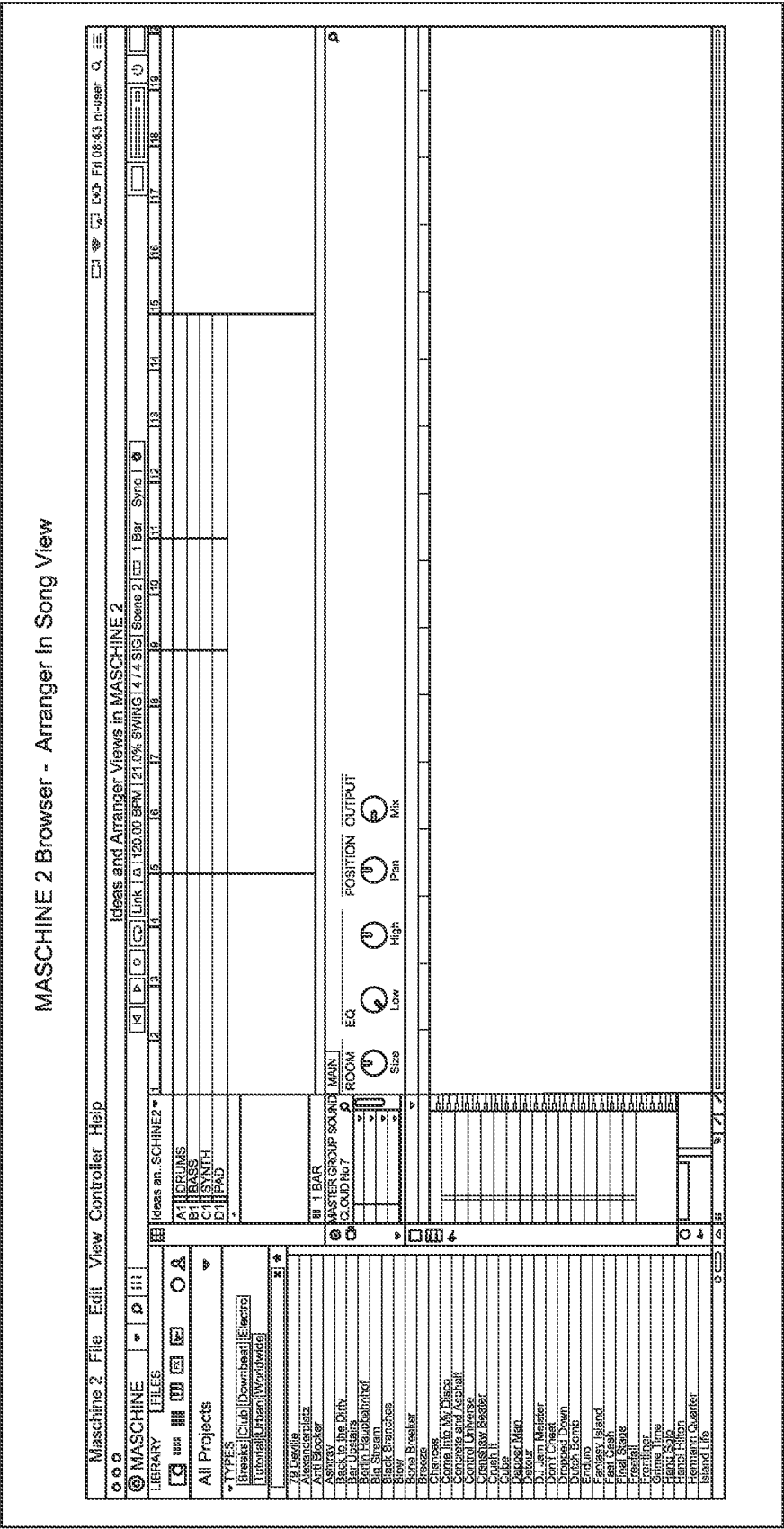


FIG. 3C2
(PRIOR ART)

NI Traktor Kontrol S4

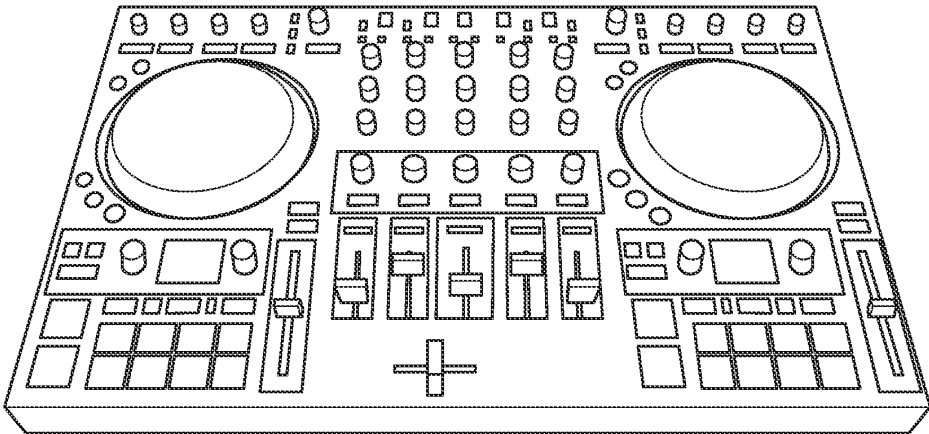


FIG. 3D1
(PRIOR ART)

NI Traktor Kontrol S4

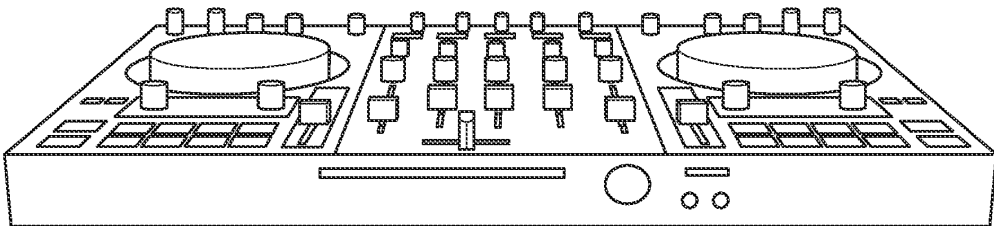


FIG. 3D2
(PRIOR ART)

[illegible]

FIG. 3E1
(PRIOR ART)

NI TRAKTOR PRO PLUS Application

[illegible]

FIG. 3E2
(PRIOR ART)

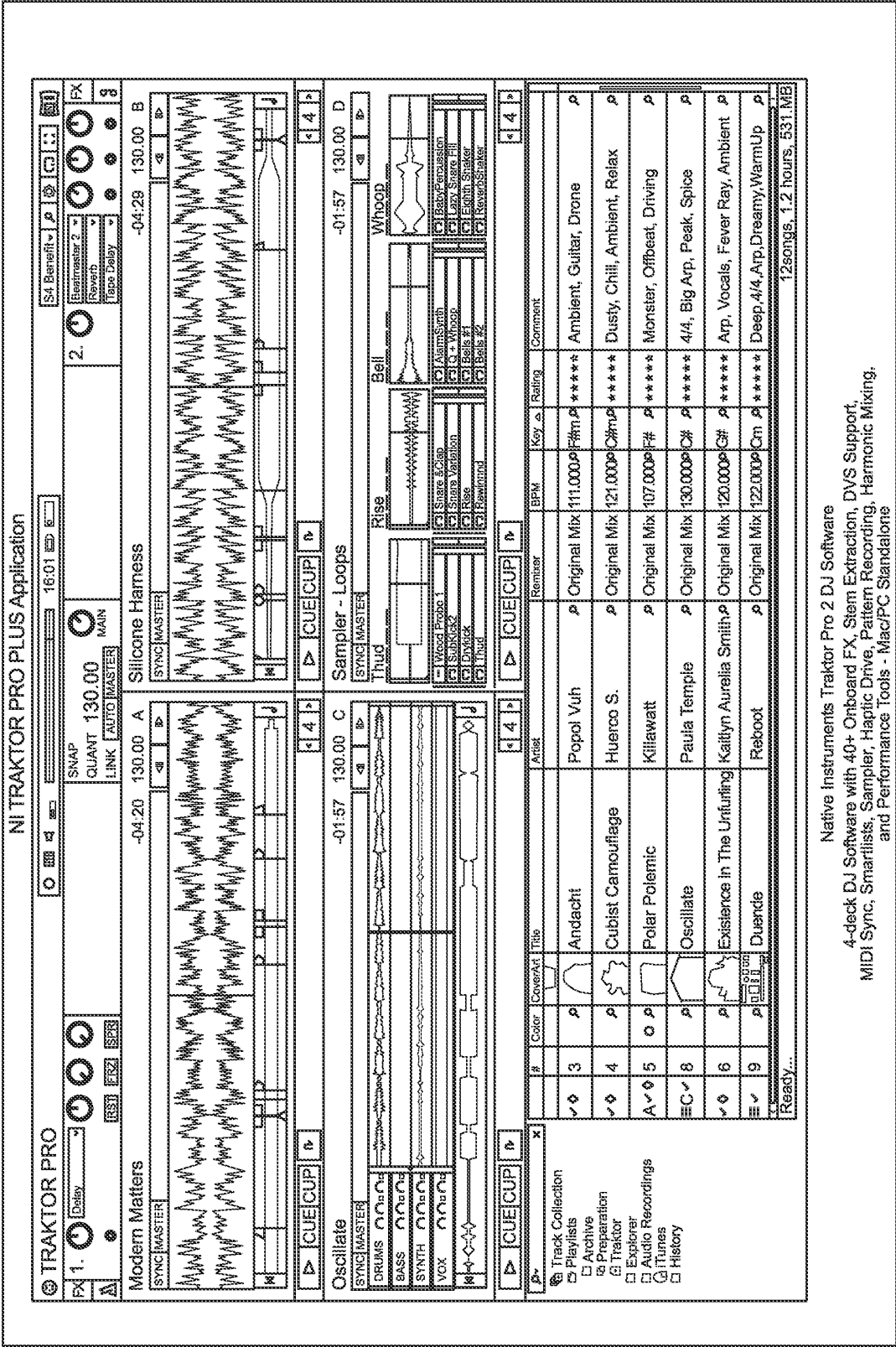
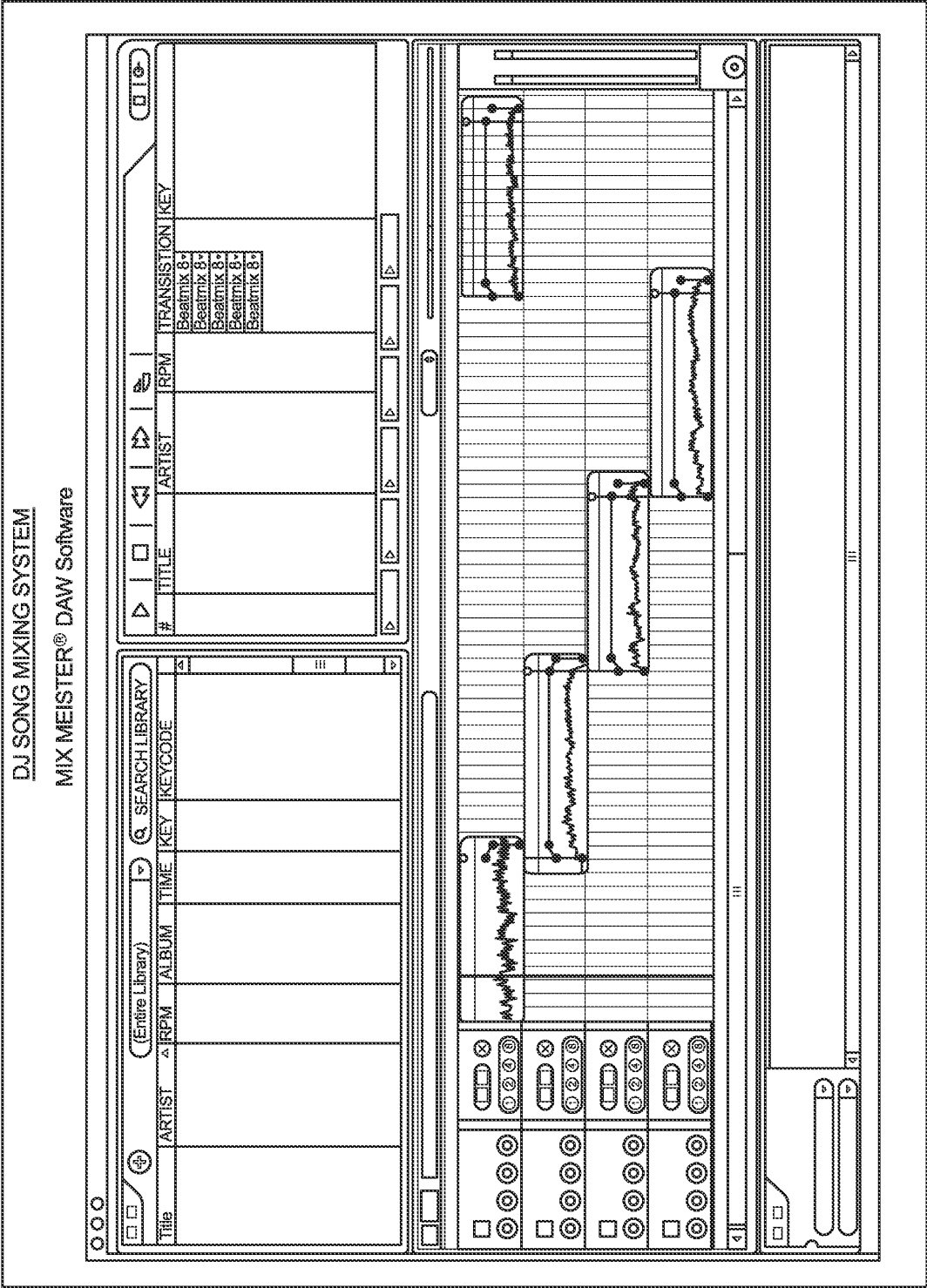


FIG. 3E3
(PRIOR ART)



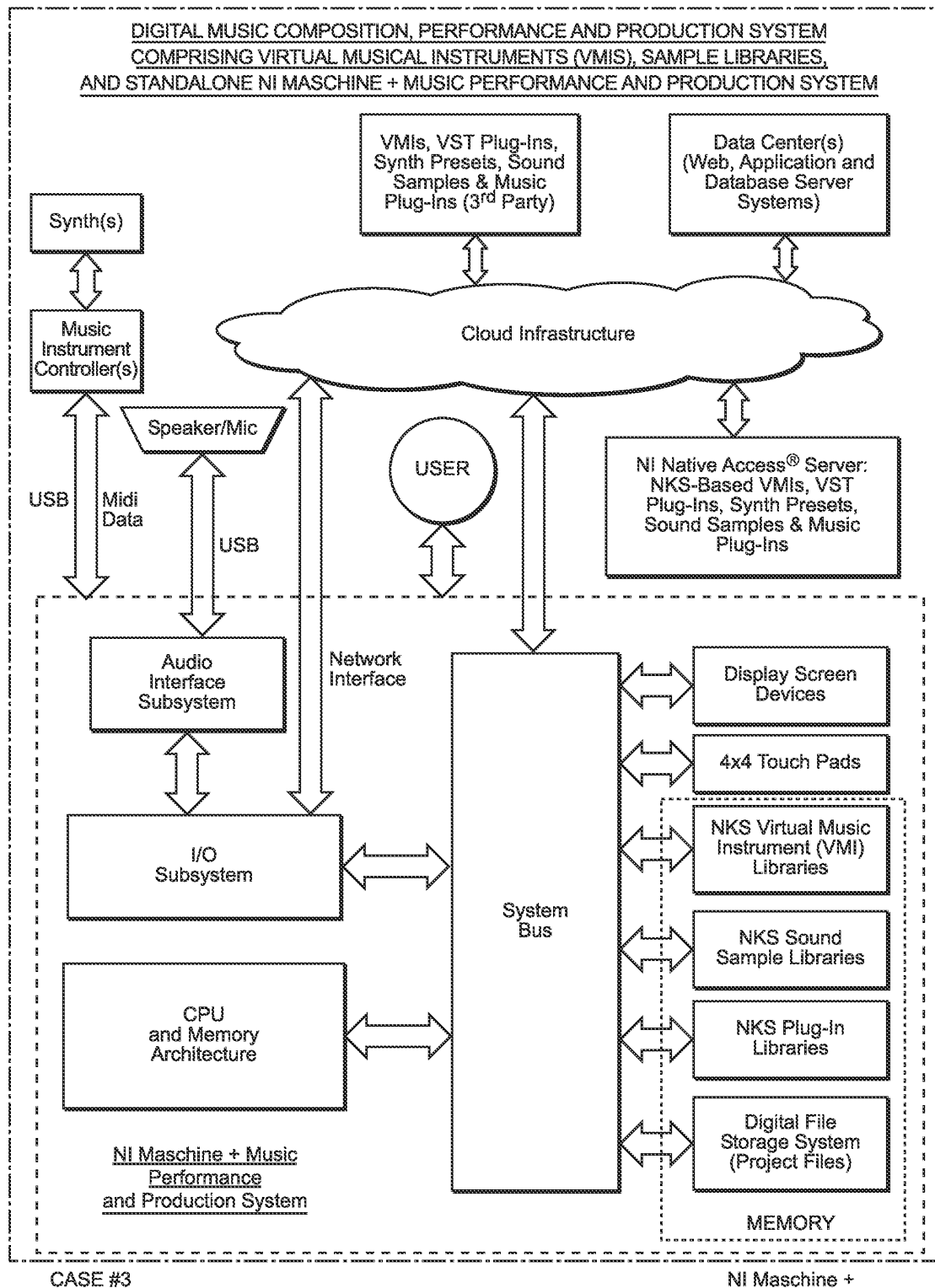


FIG. 4
(PRIOR ART)

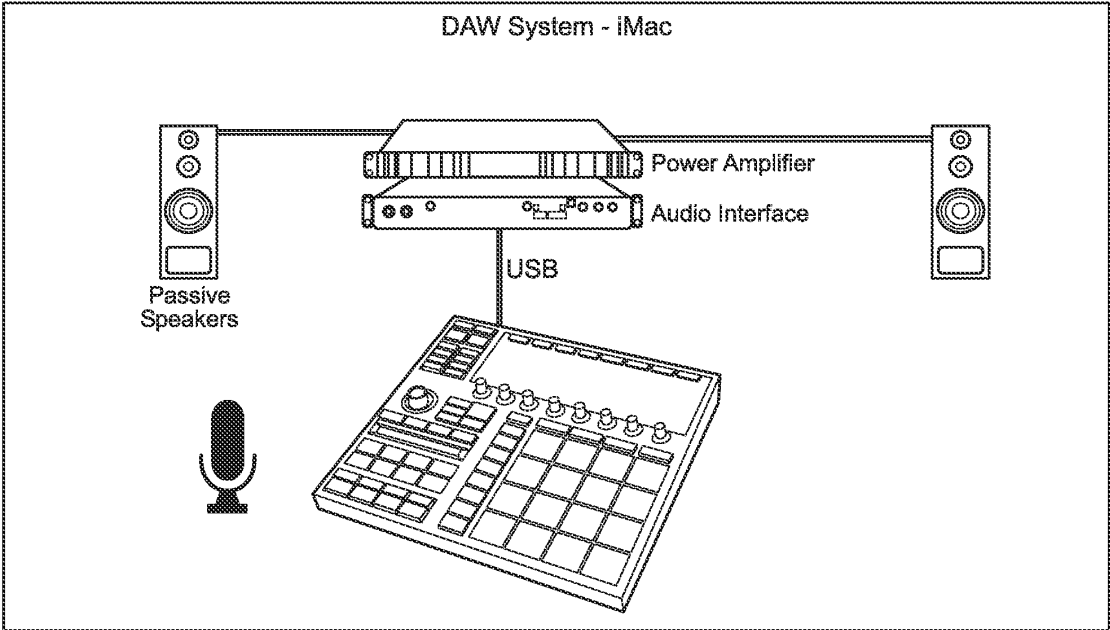


FIG. 4A
(PRIOR ART)

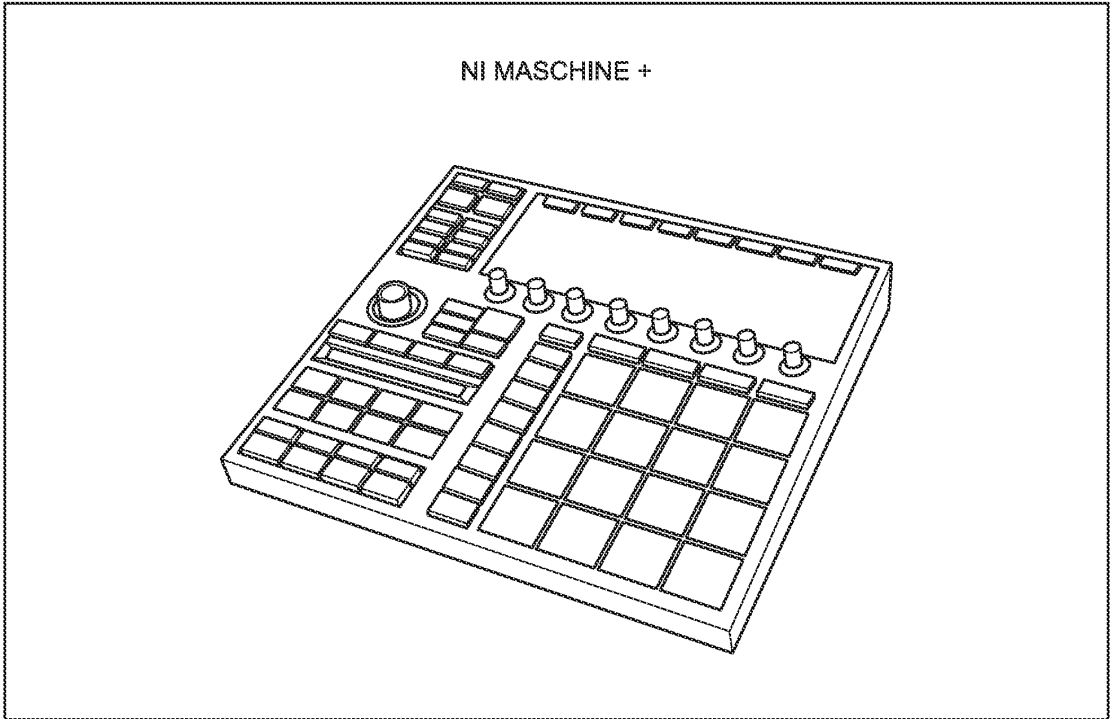


FIG. 4B
(PRIOR ART)

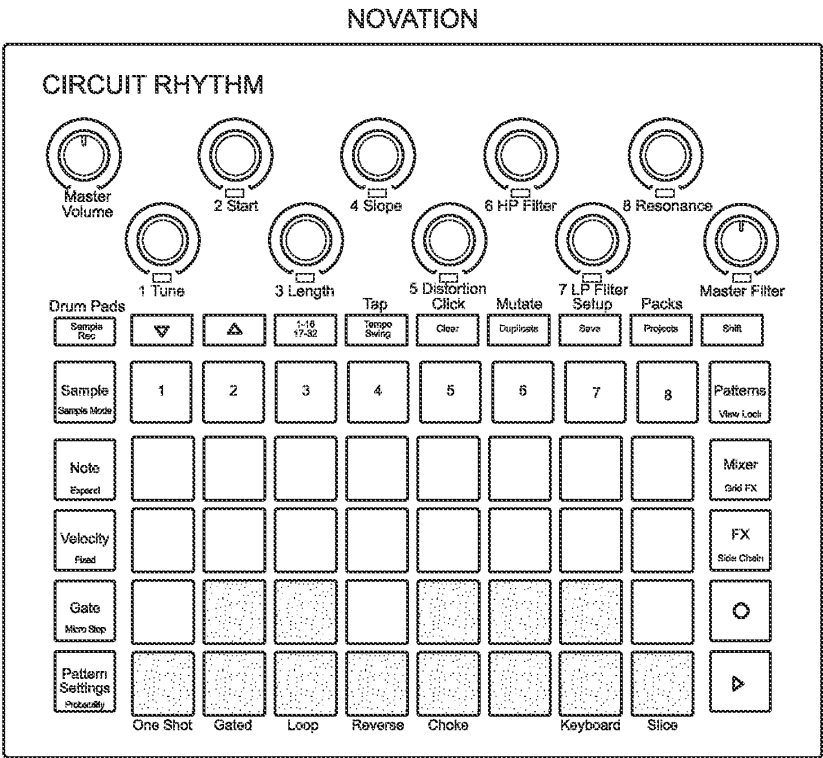


FIG. 4C
(PRIOR ART)

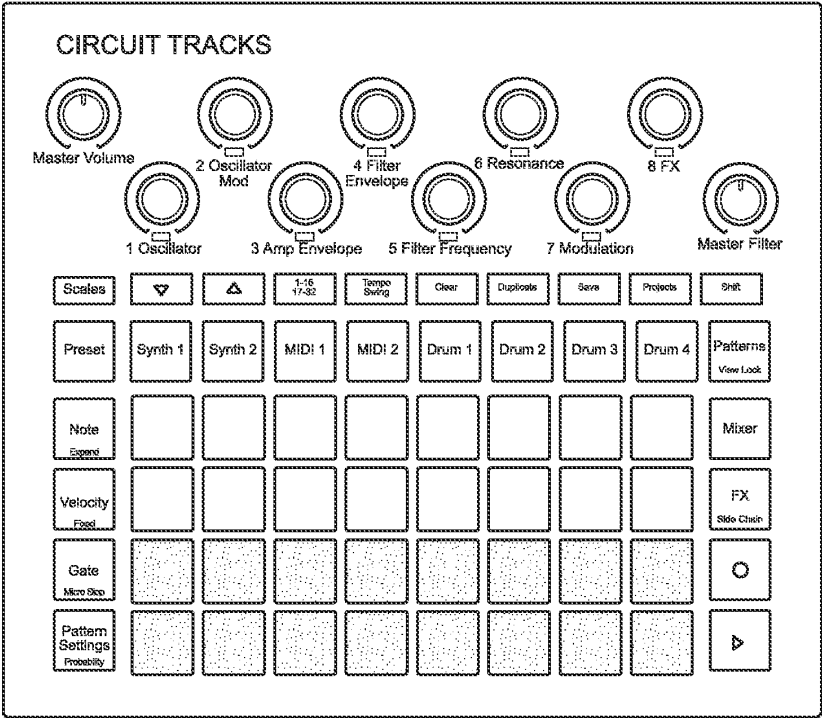


FIG. 4D
(PRIOR ART)

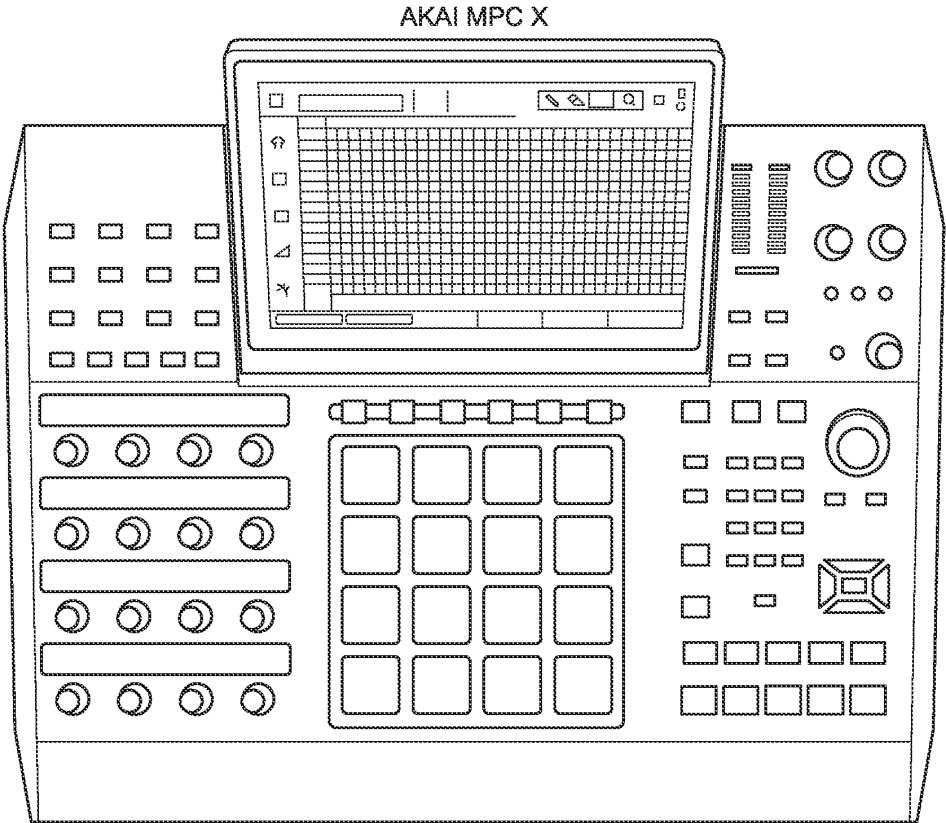


FIG. 4E1
(PRIOR ART)

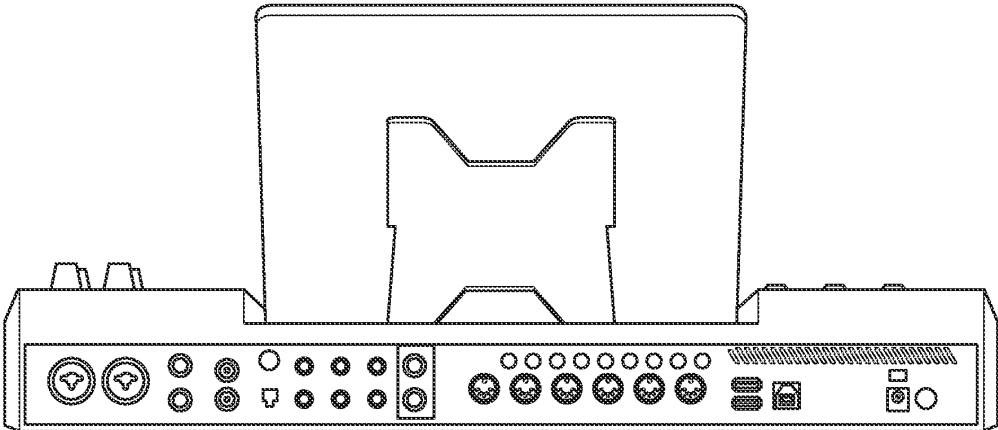
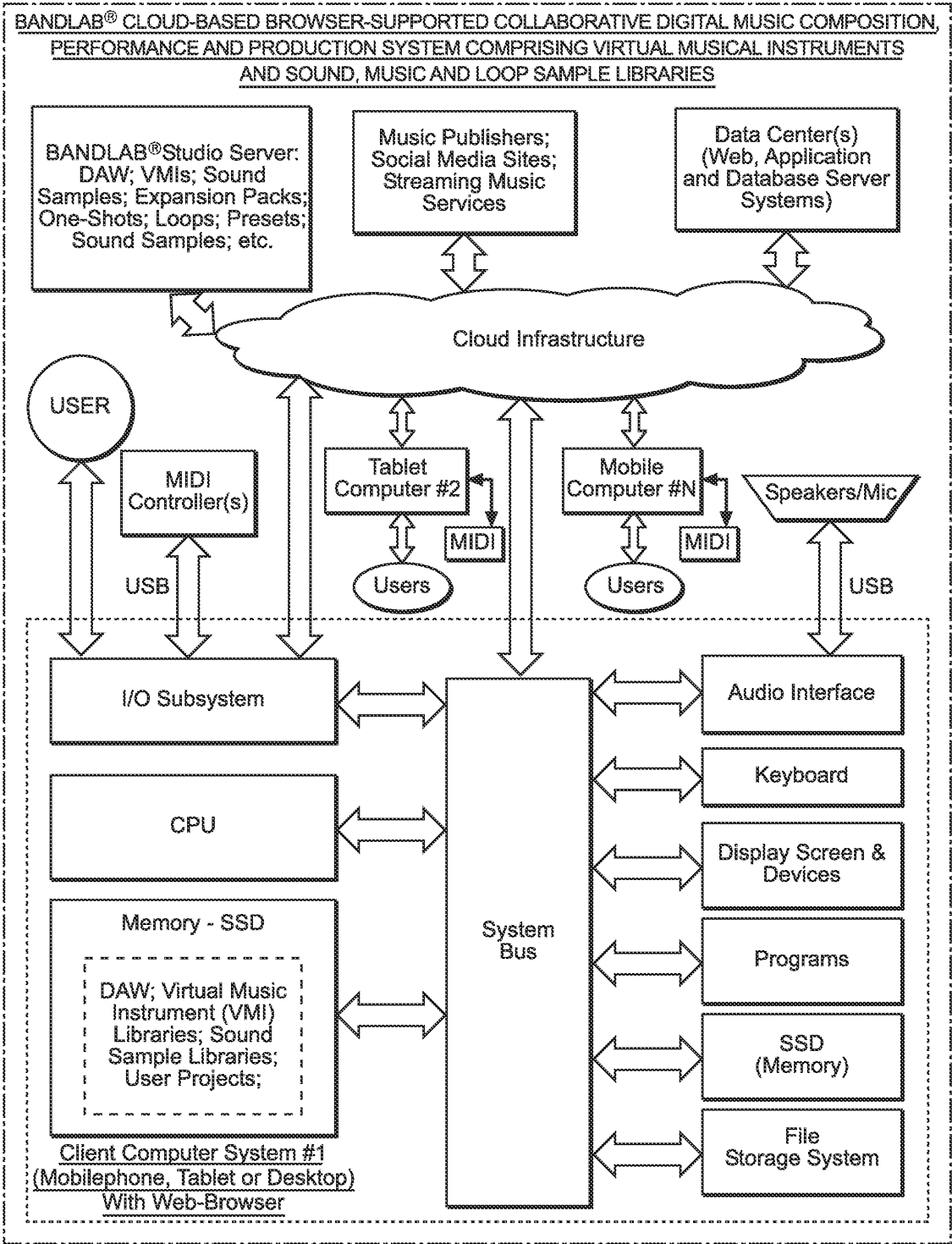


FIG. 4E2
(PRIOR ART)



CASE #4

FIG. 5
(PRIOR ART)

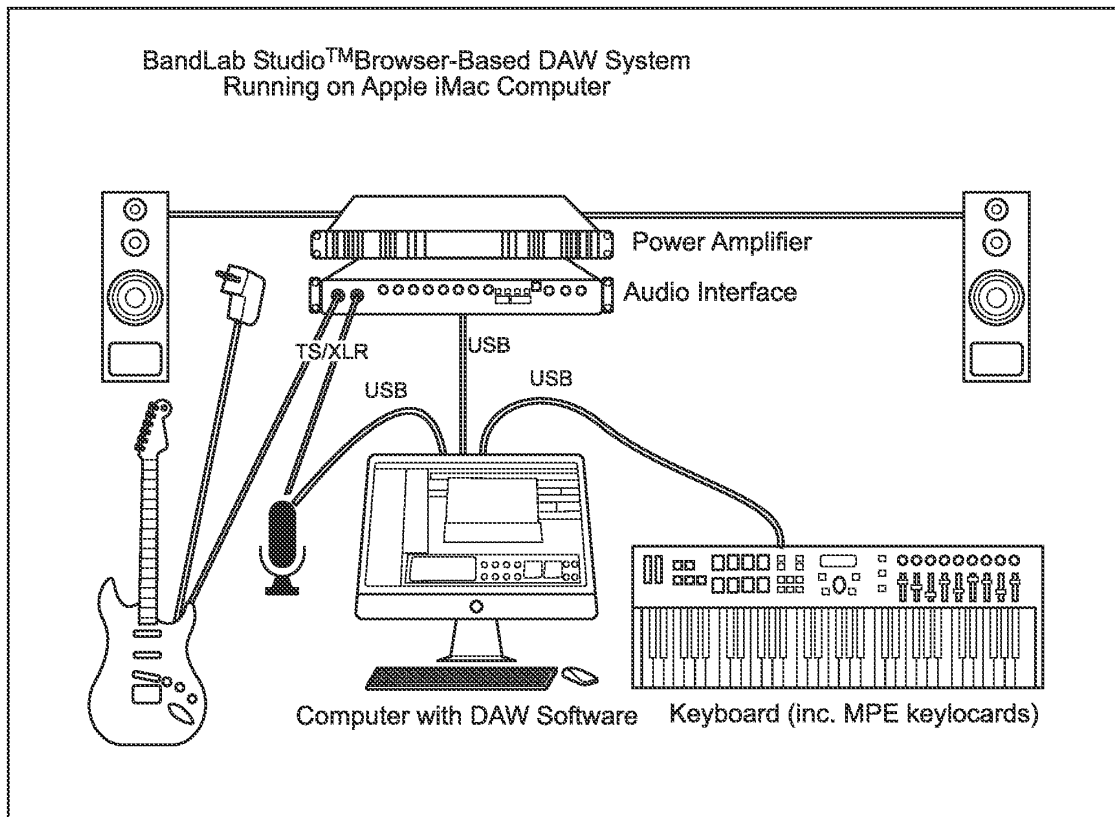


FIG. 5A
(PRIOR ART)

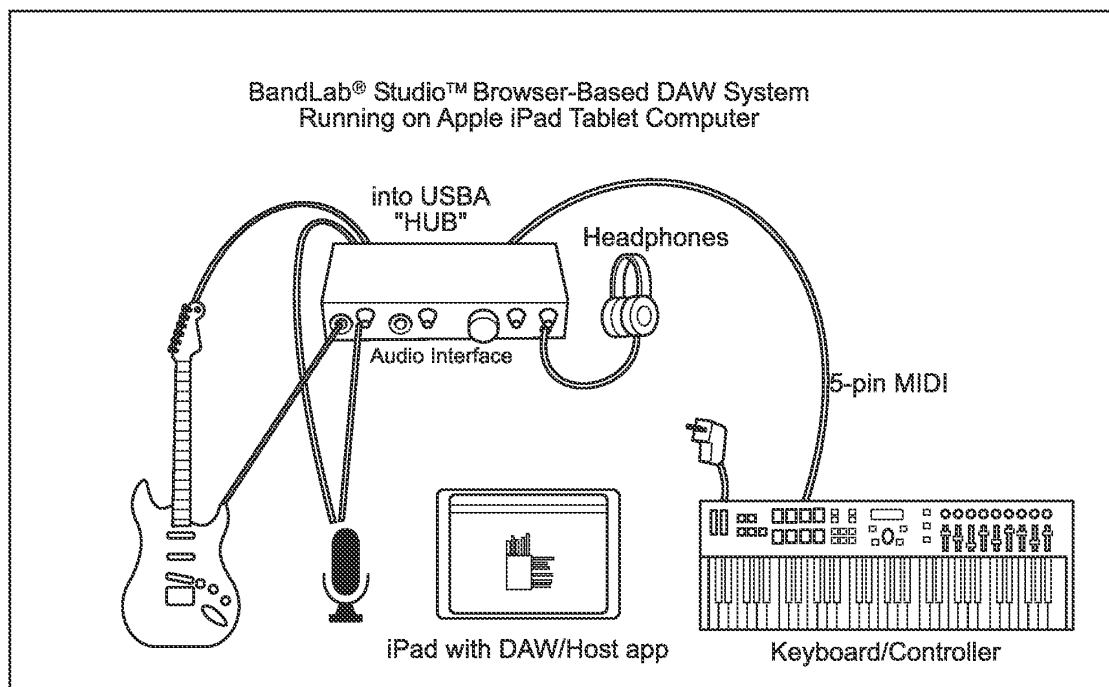


FIG. 5B
(PRIOR ART)

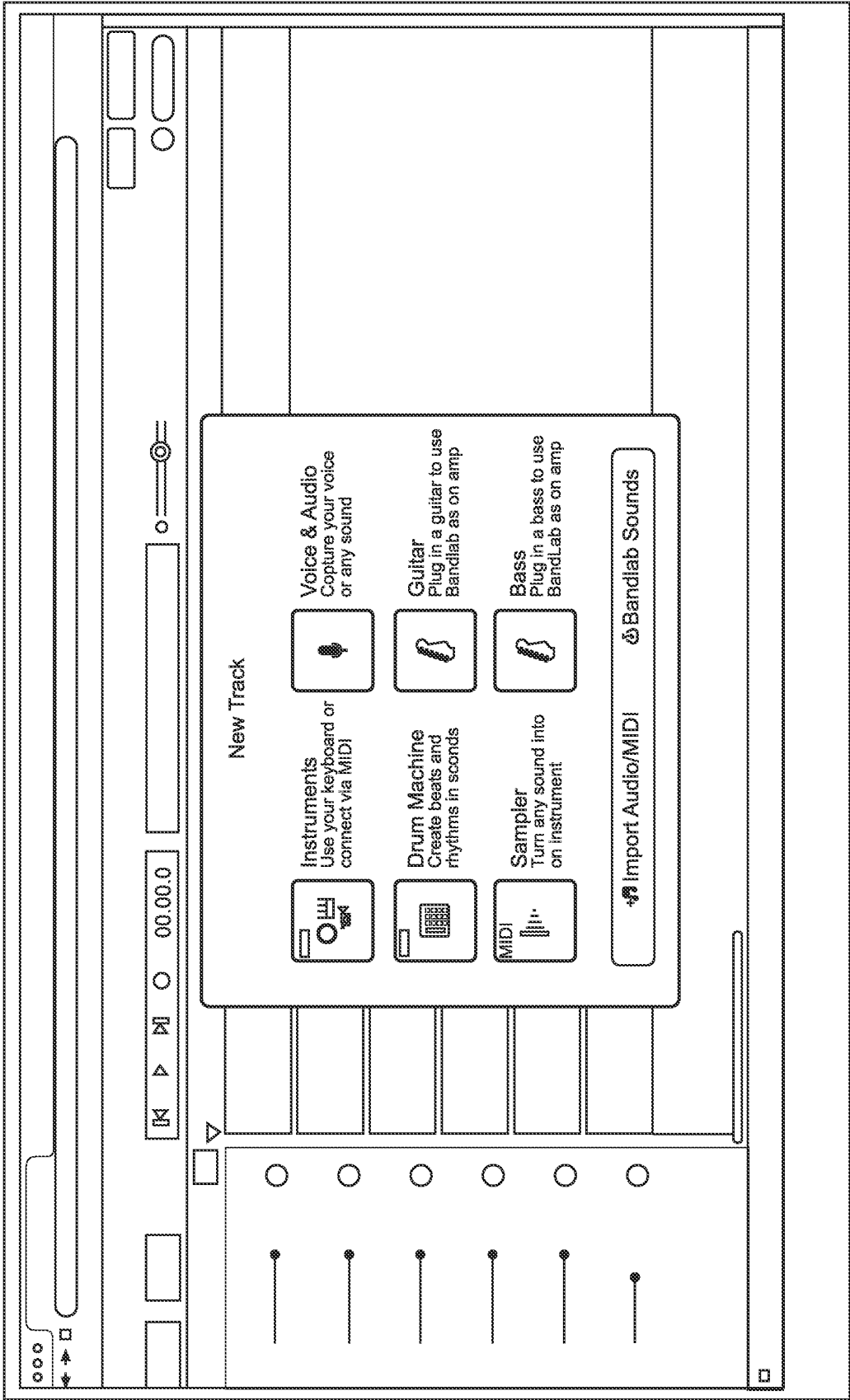


FIG. 5C1
(PRIOR ART)

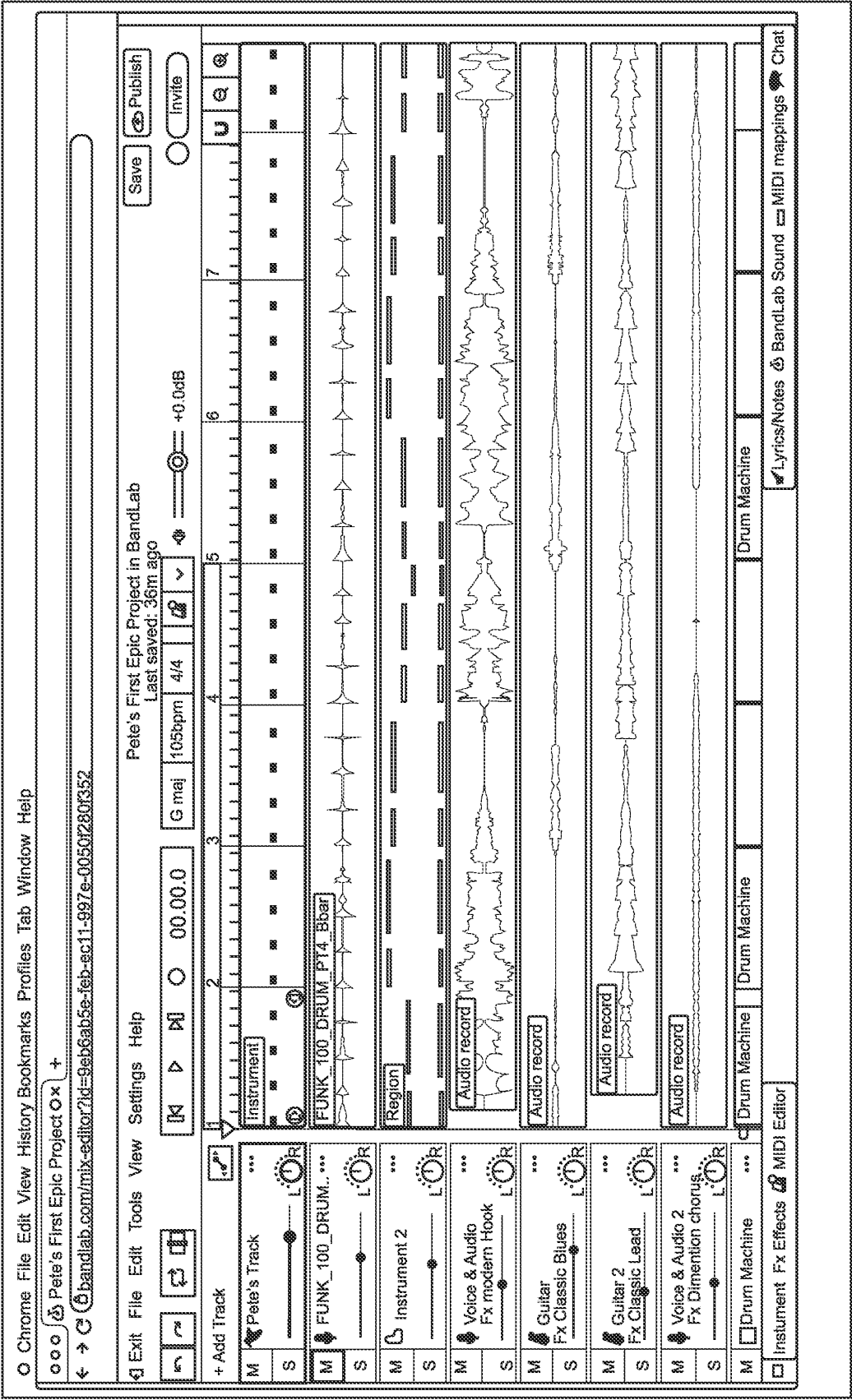


FIG. 5C2
(PRIOR ART)

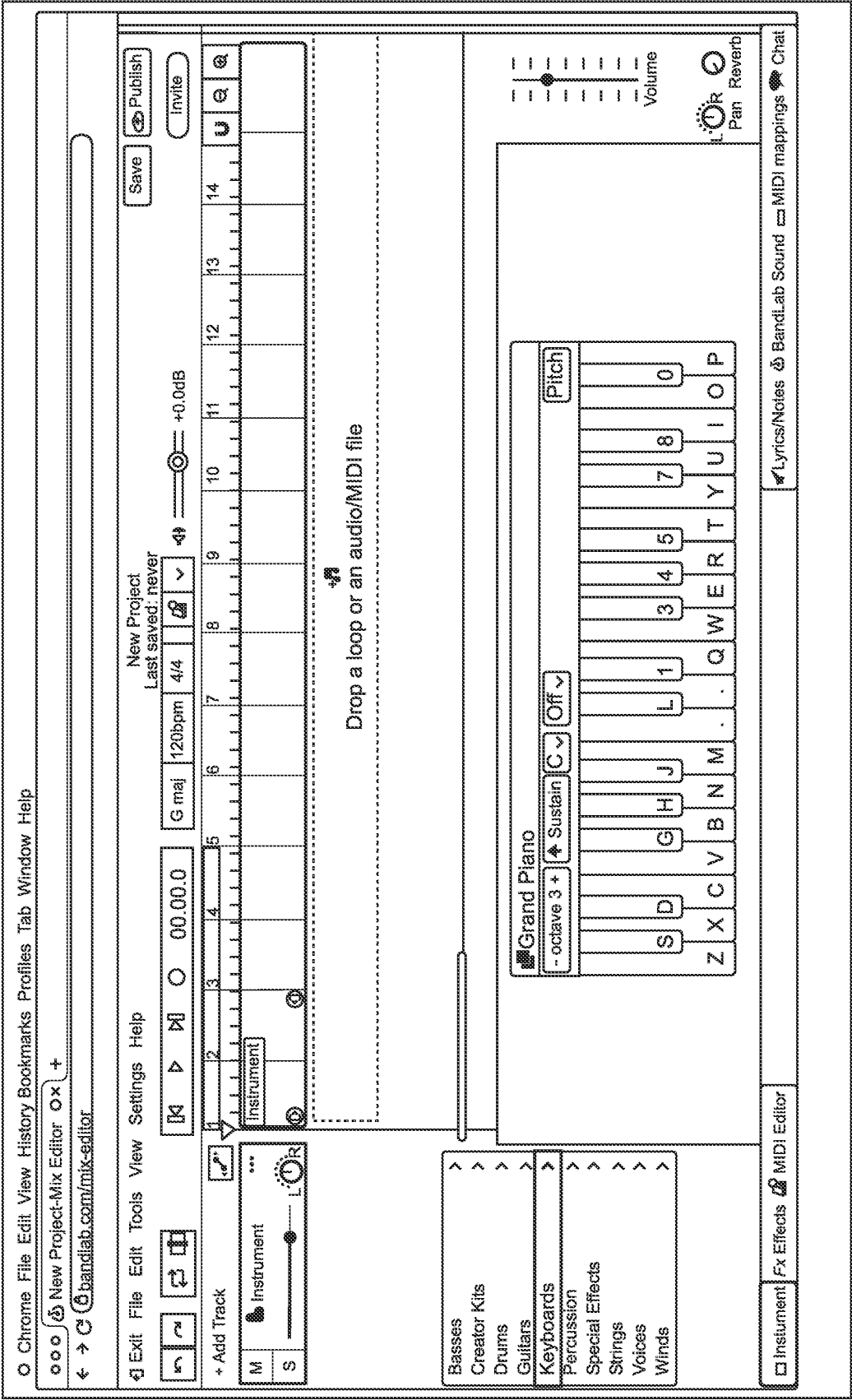


FIG. 5C3
(PRIOR ART)

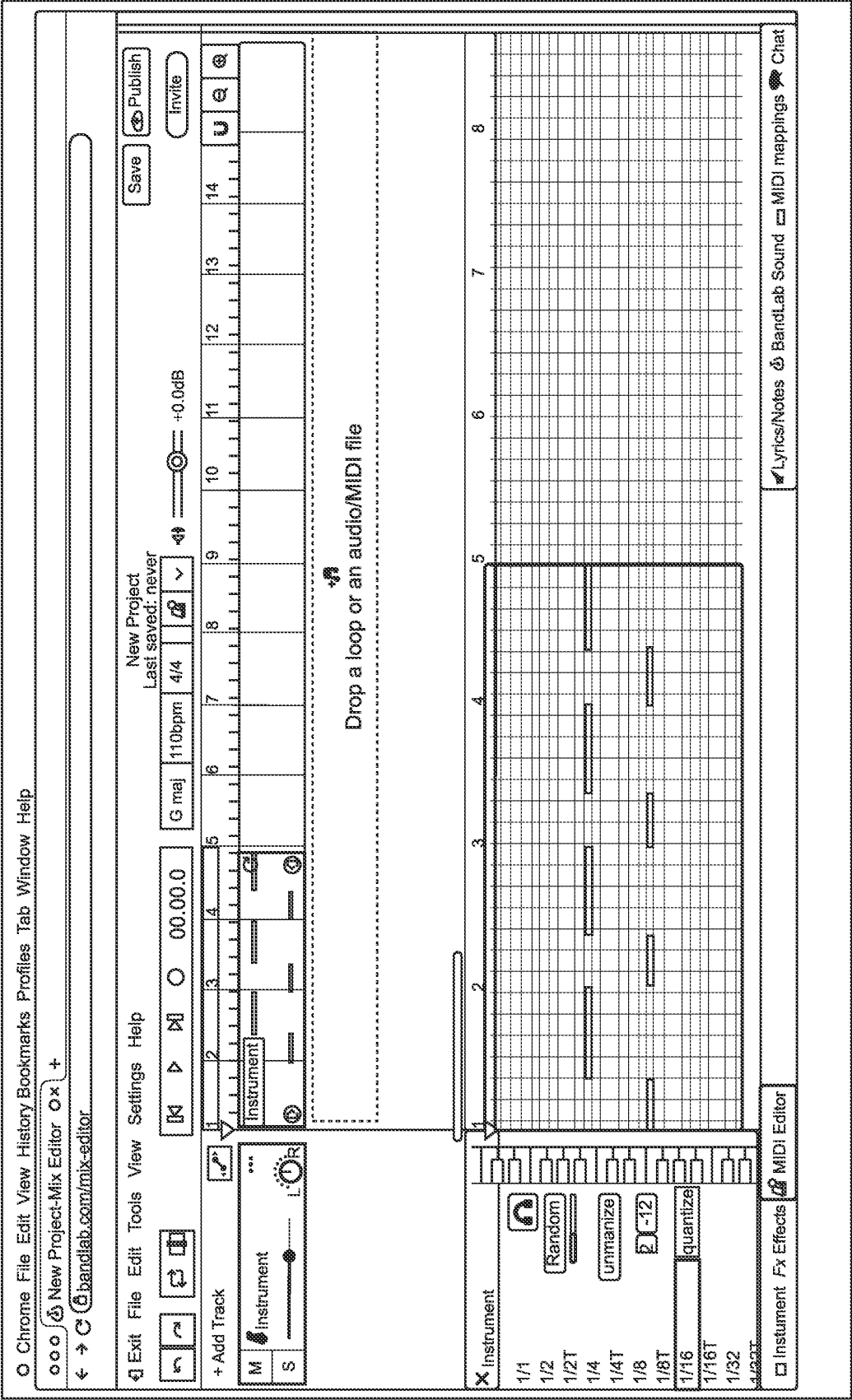


FIG. 5C4
(PRIOR ART)

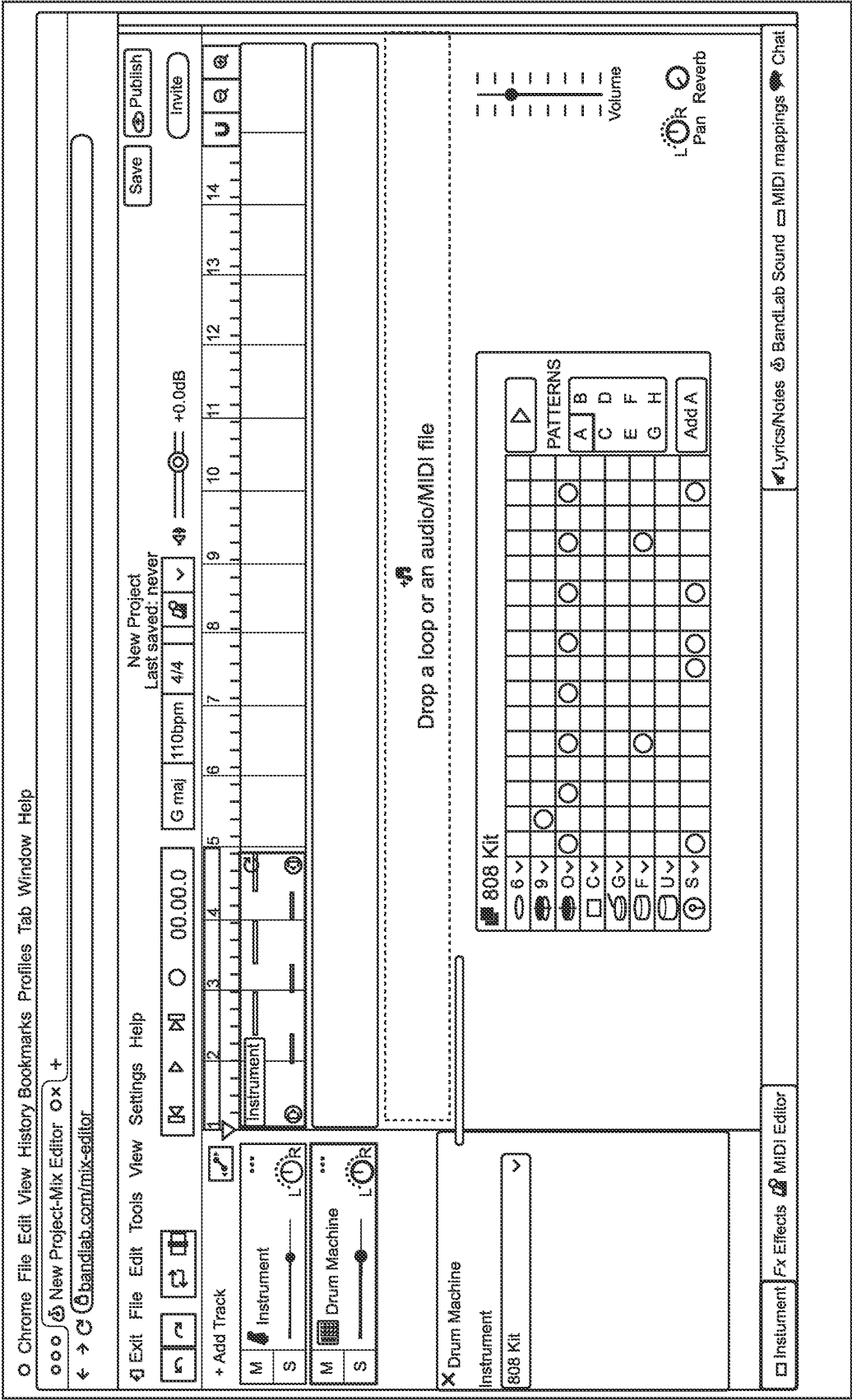


FIG. 5C5
(PRIOR ART)

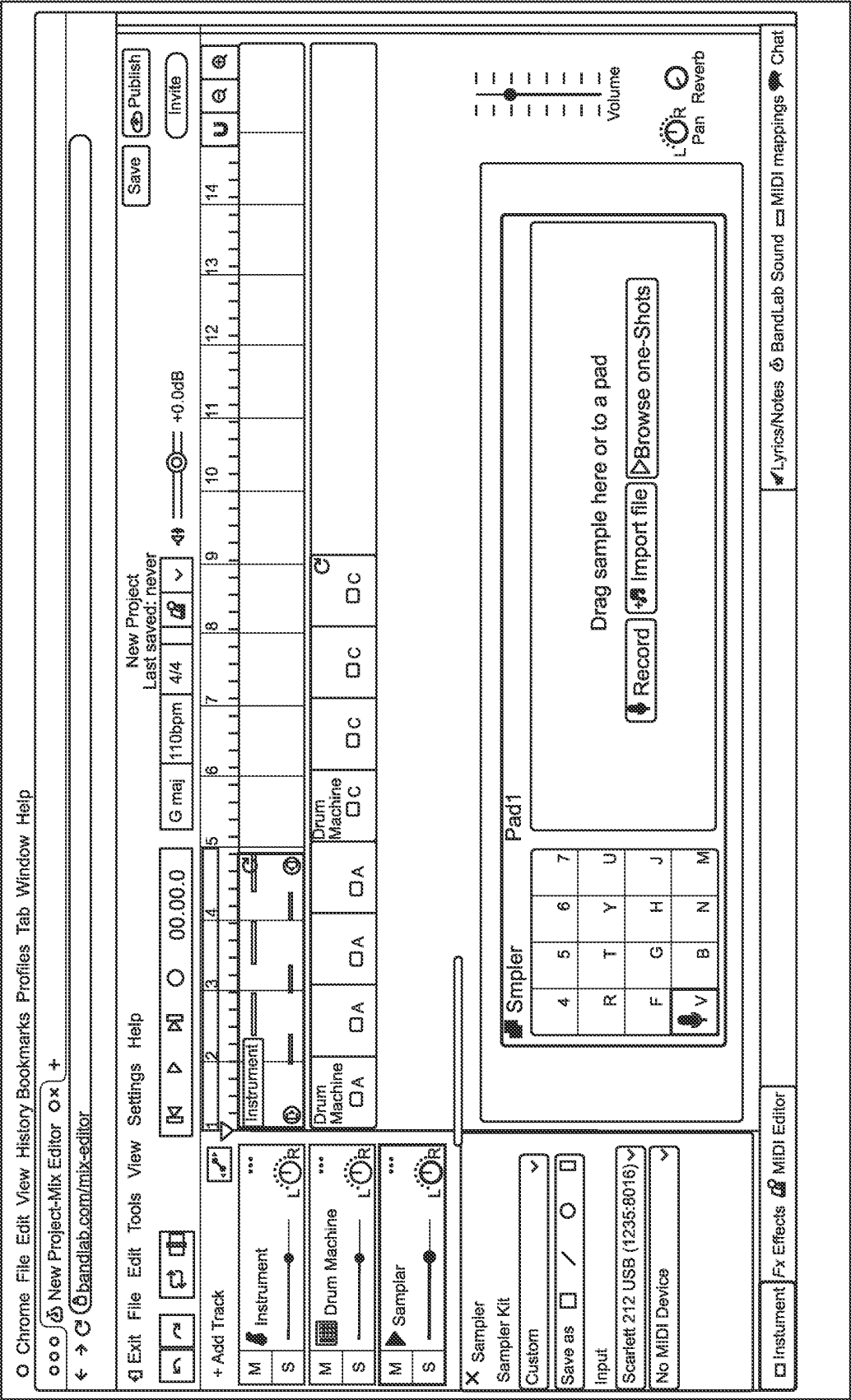


FIG. 5C6
(PRIOR ART)

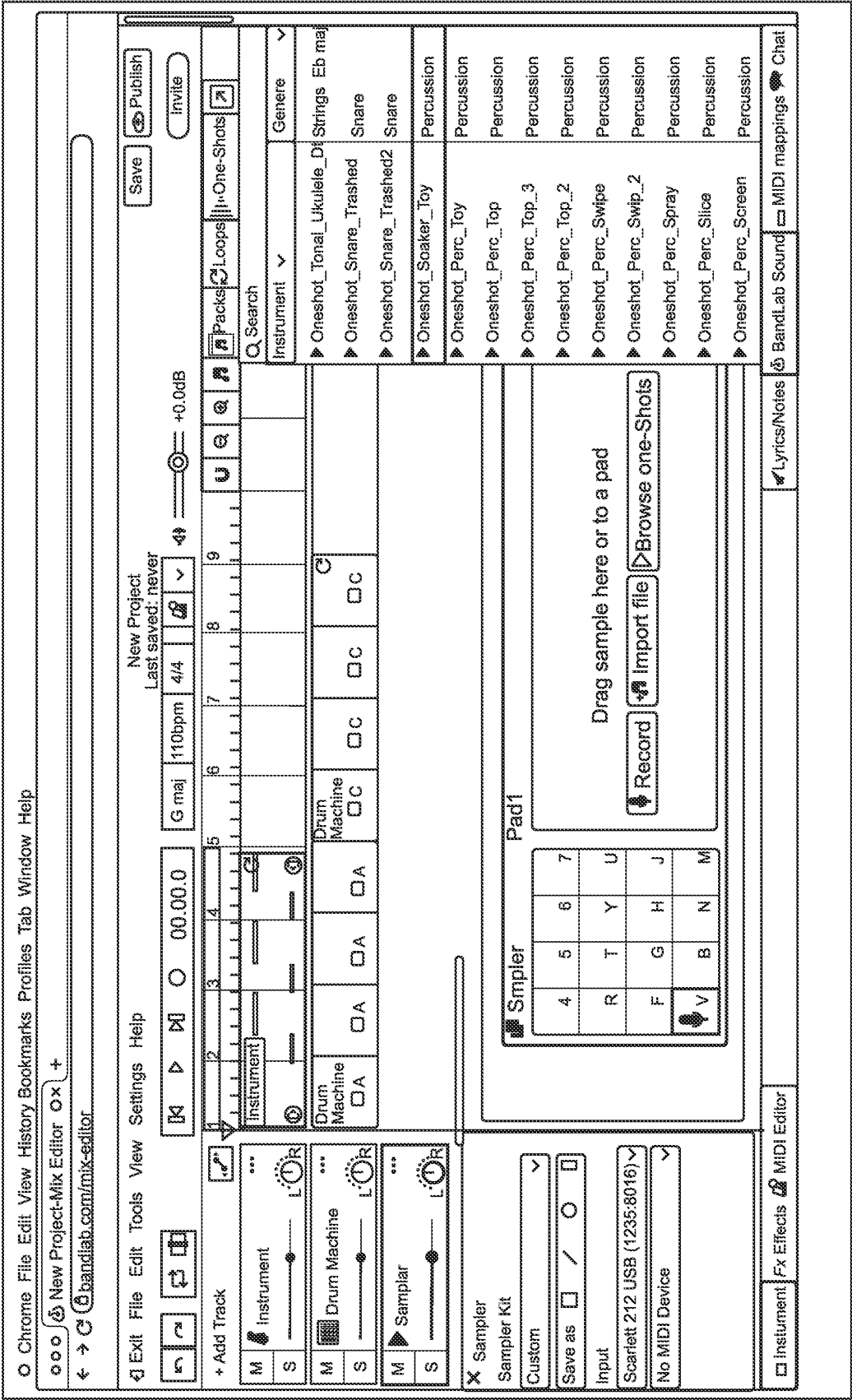


FIG. 5C7
(PRIOR ART)

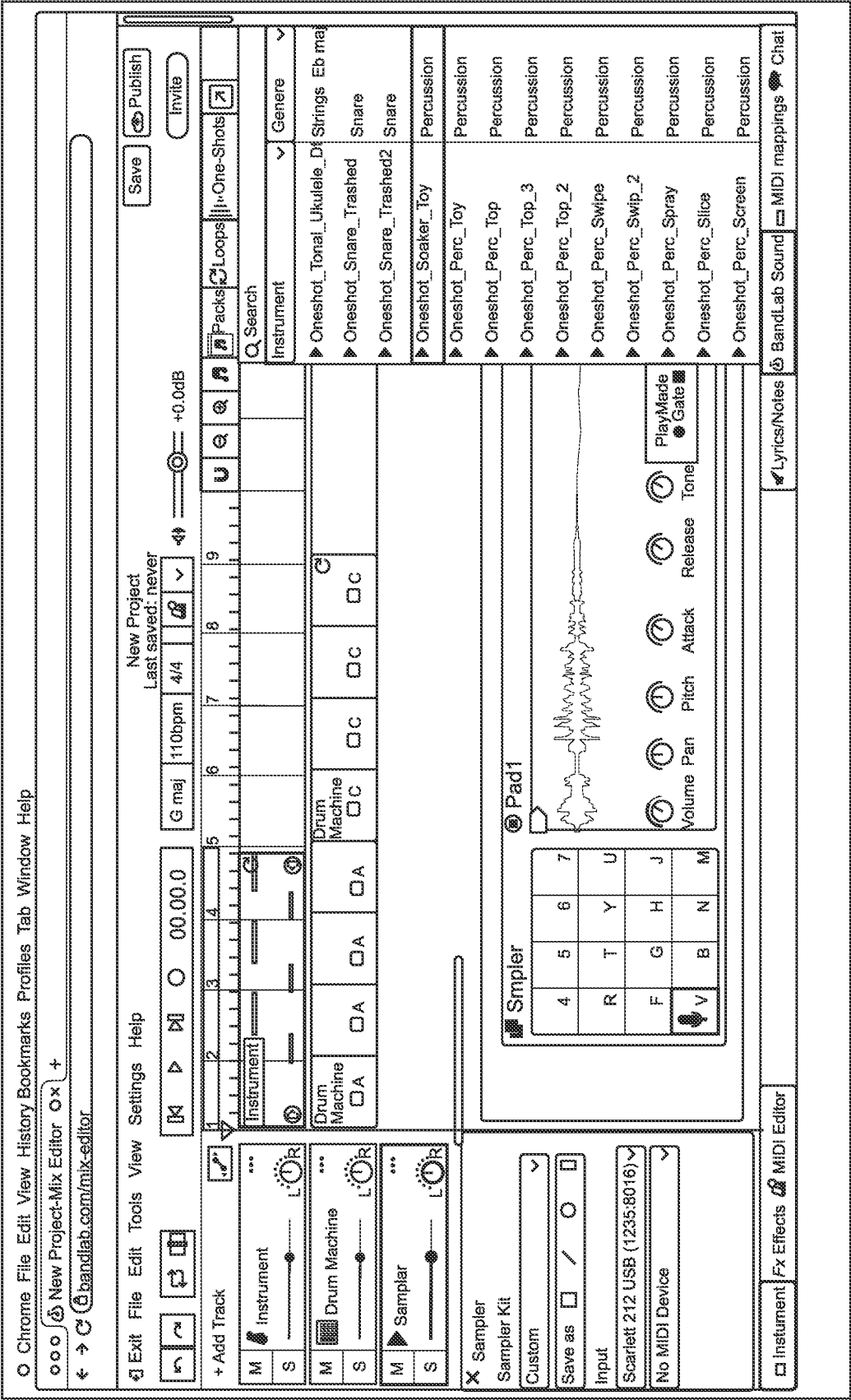


FIG. 5C8
(PRIOR ART)

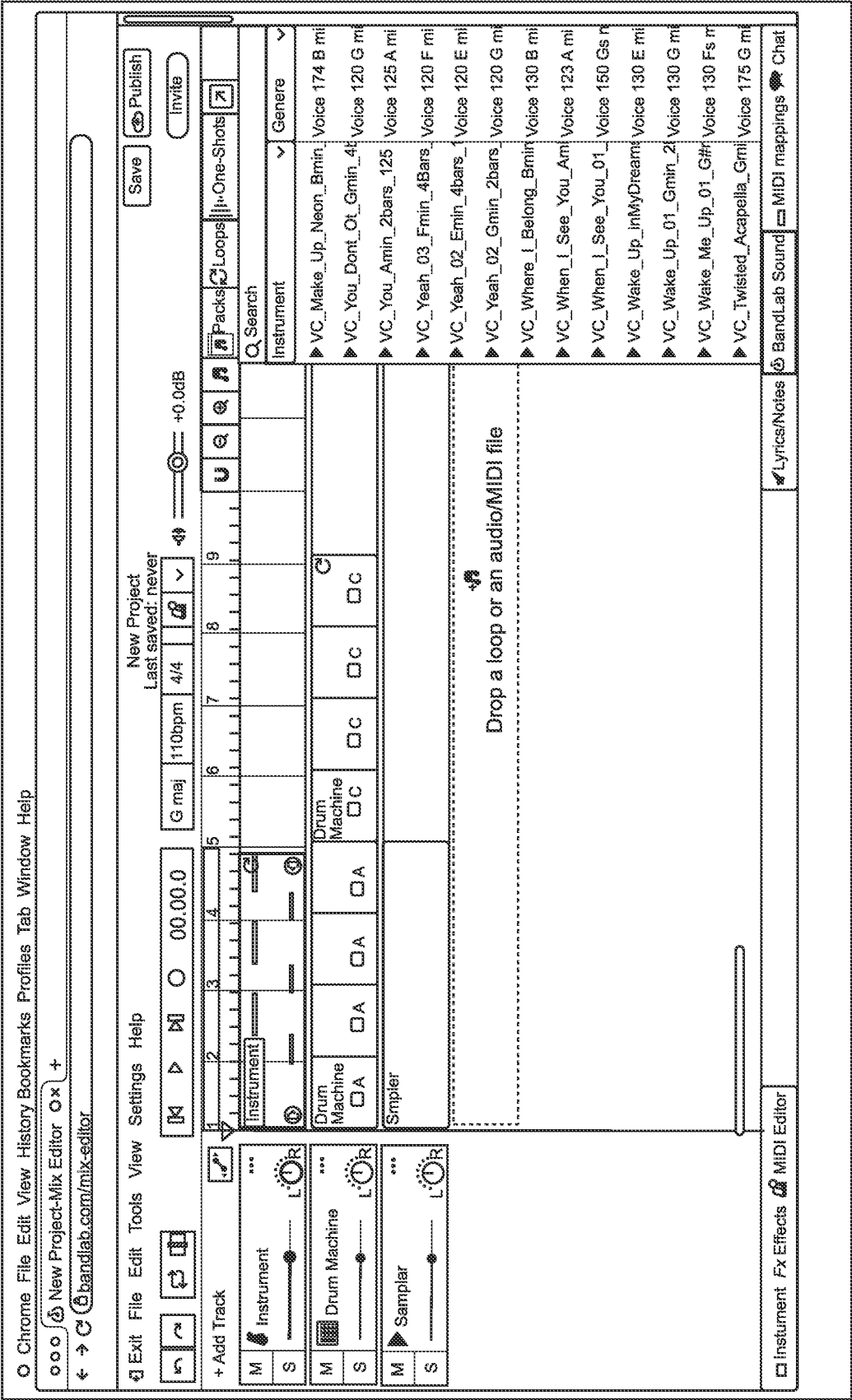


FIG. 5C9
(PRIOR ART)

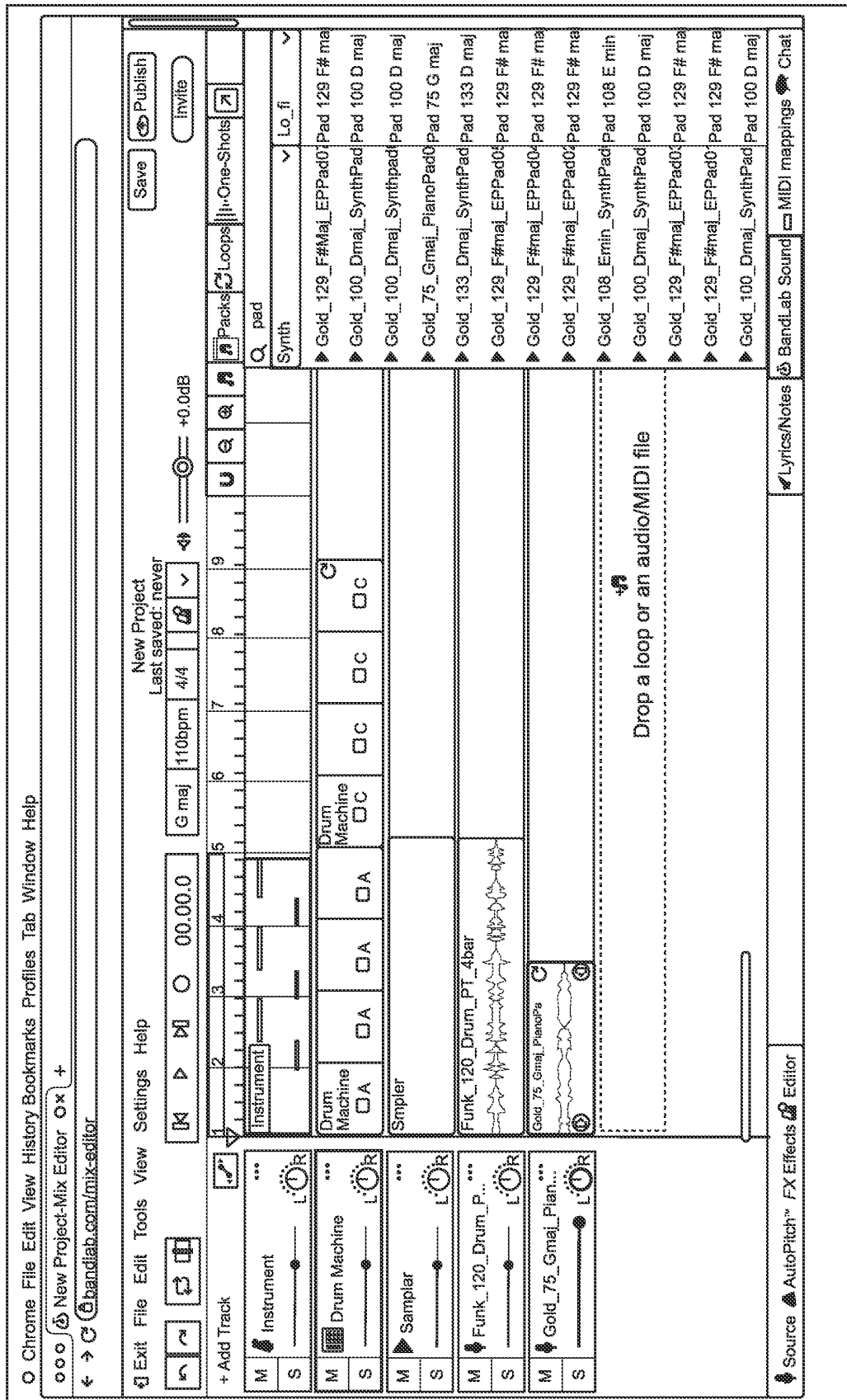


FIG. 5C10
(PRIOR ART)

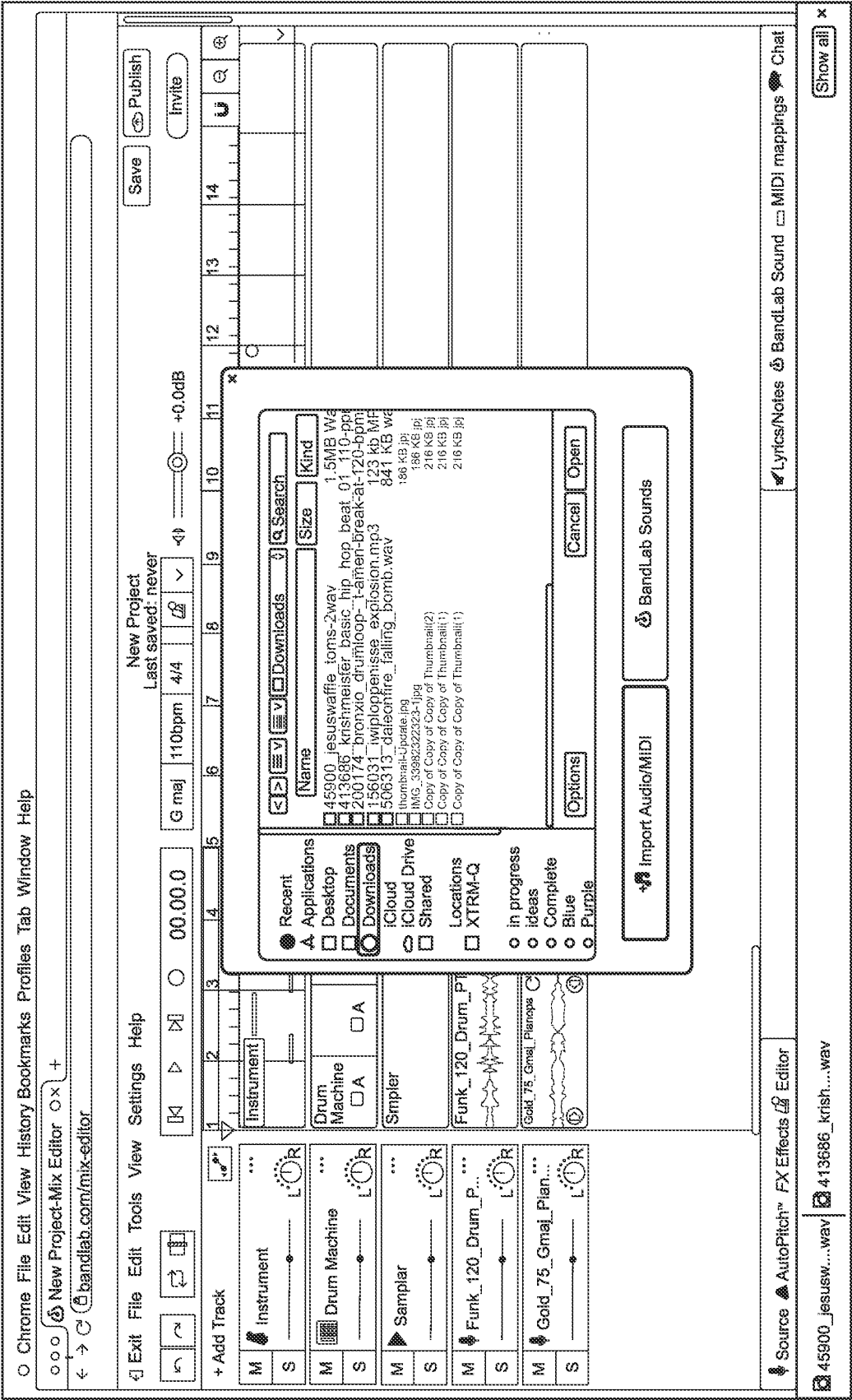


FIG. 5C11
(PRIOR ART)

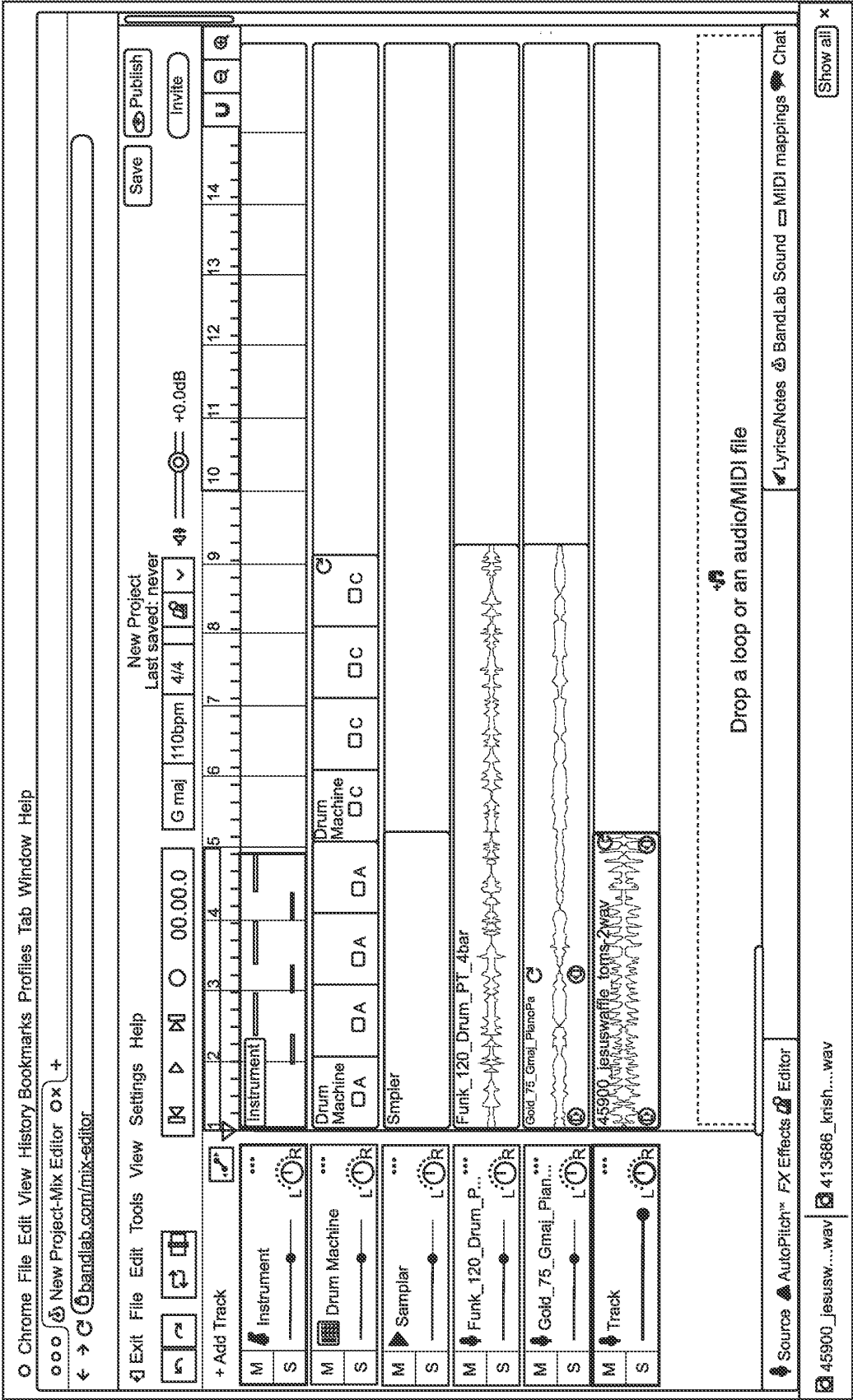


FIG. 5C12
(PRIOR ART)

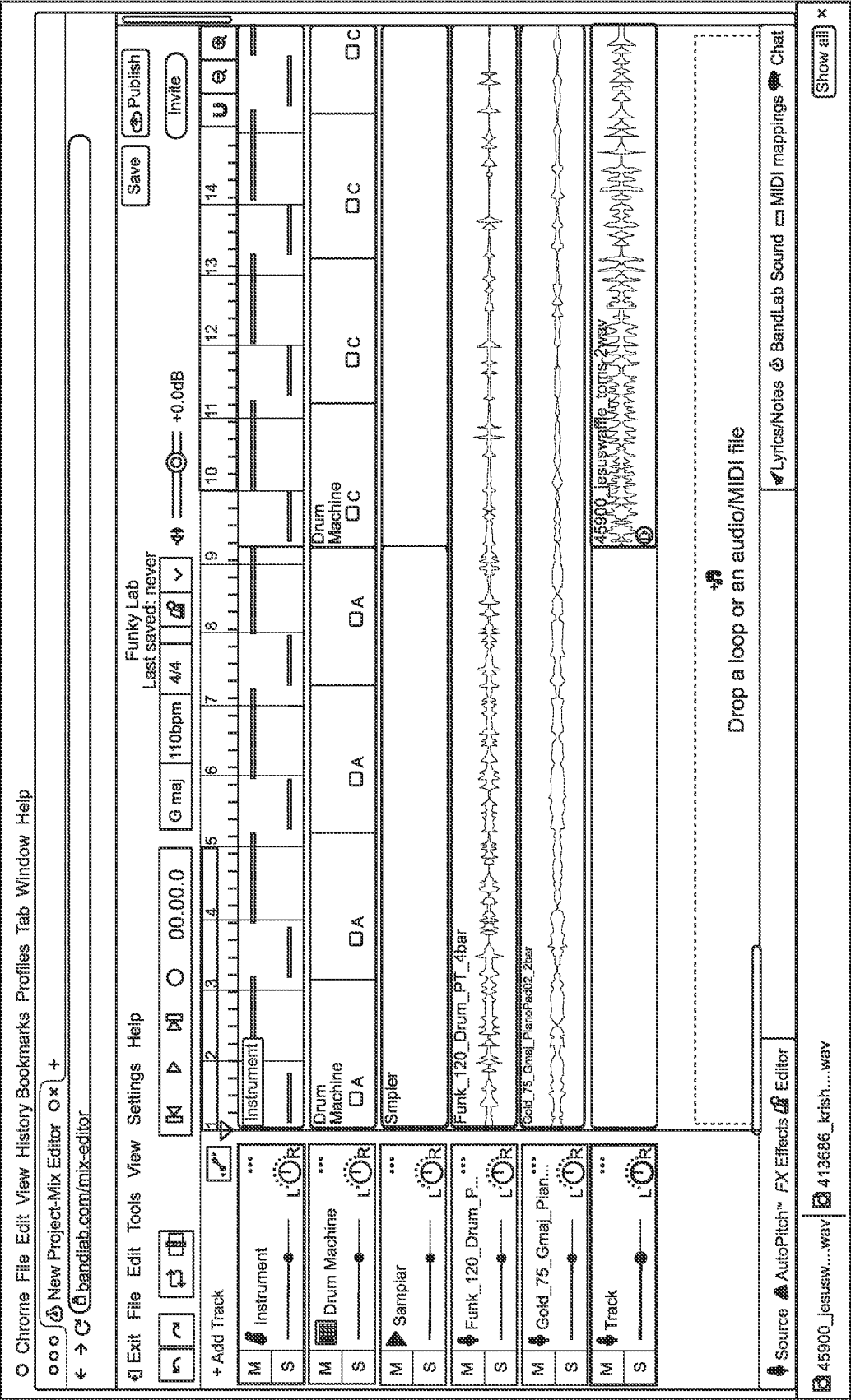


FIG. 5C13
(PRIOR ART)

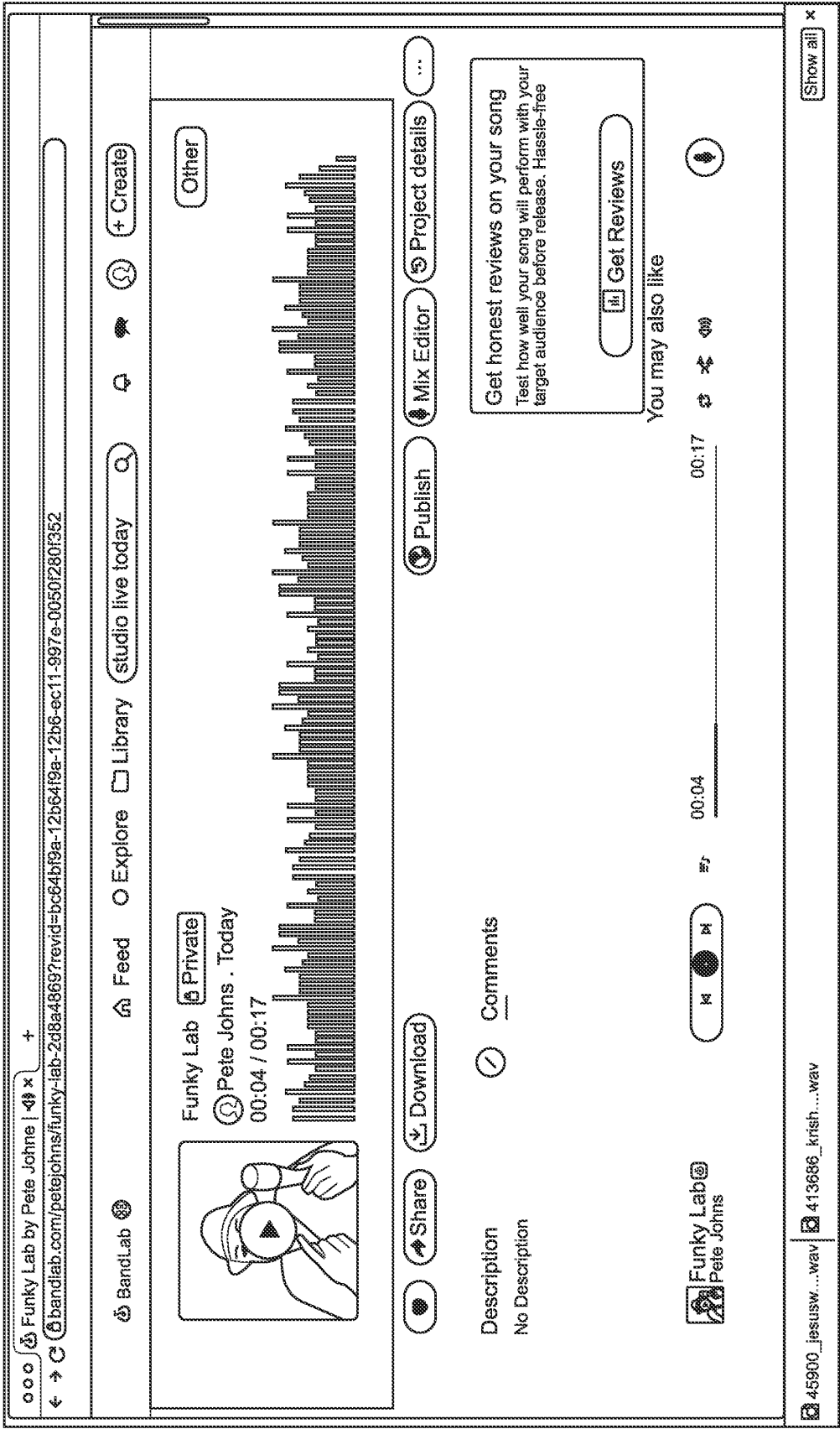
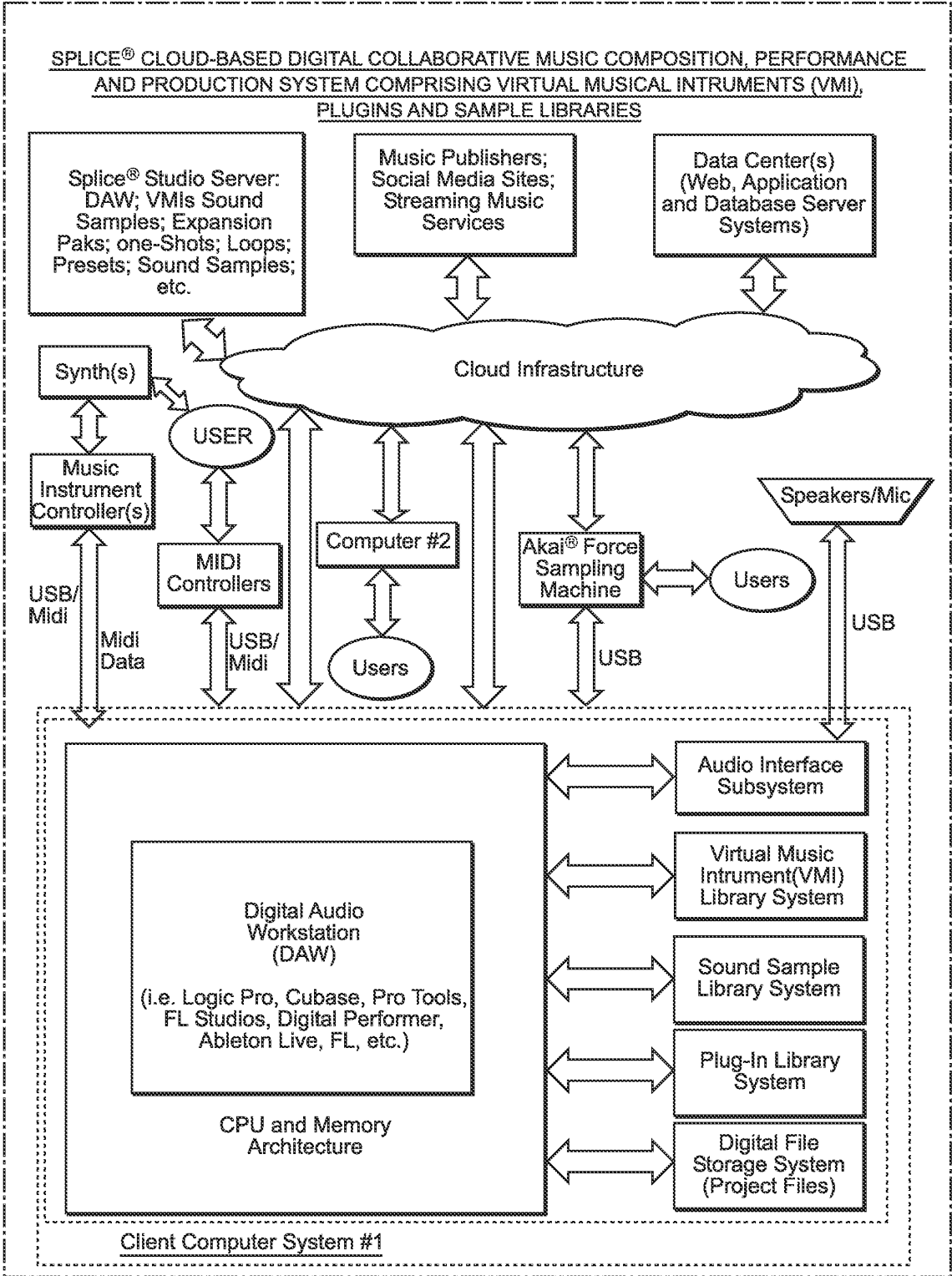


FIG. 5C14
(PRIOR ART)



CASE #5

FIG. 6
(PRIOR ART)

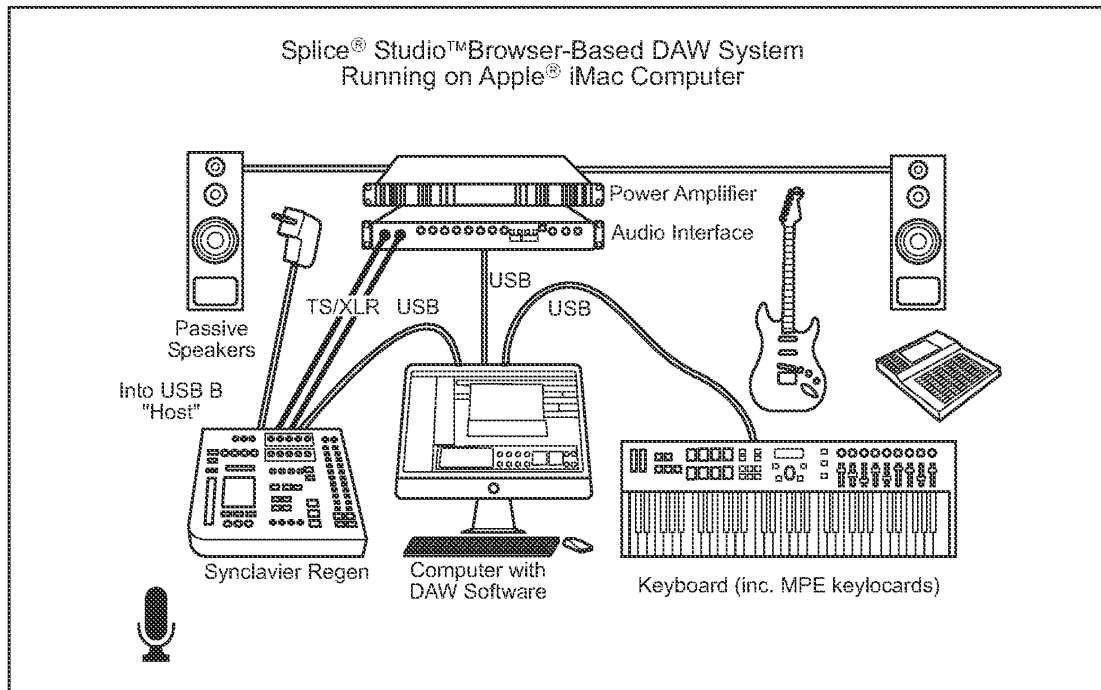


FIG. 6A
(PRIOR ART)

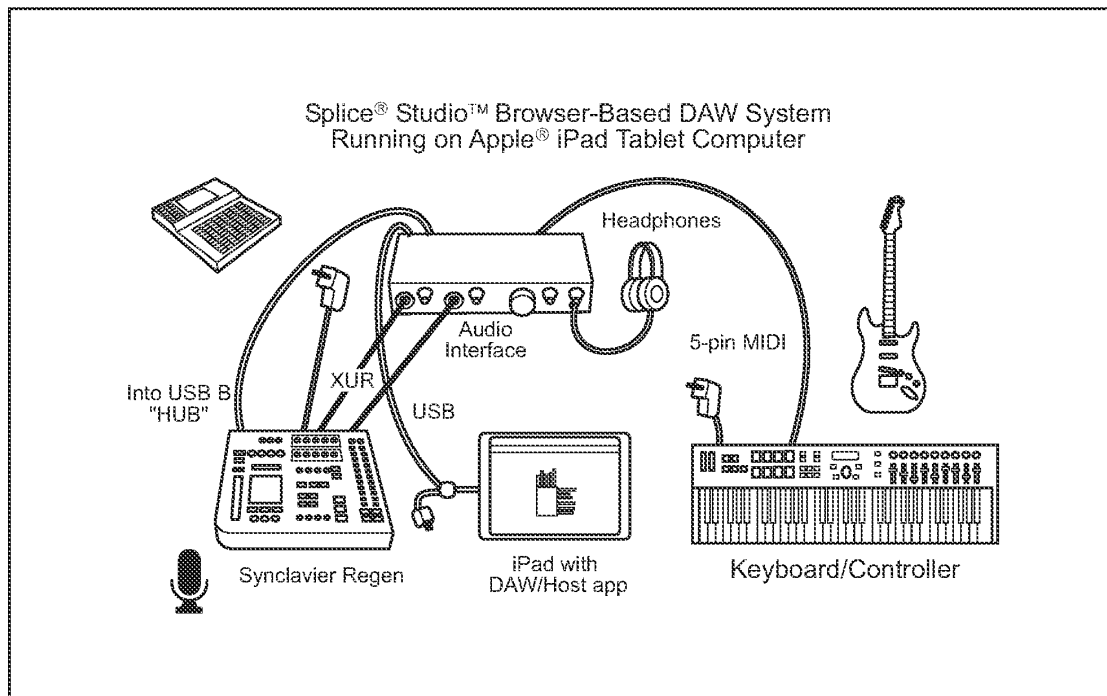


FIG. 6B
(PRIOR ART)

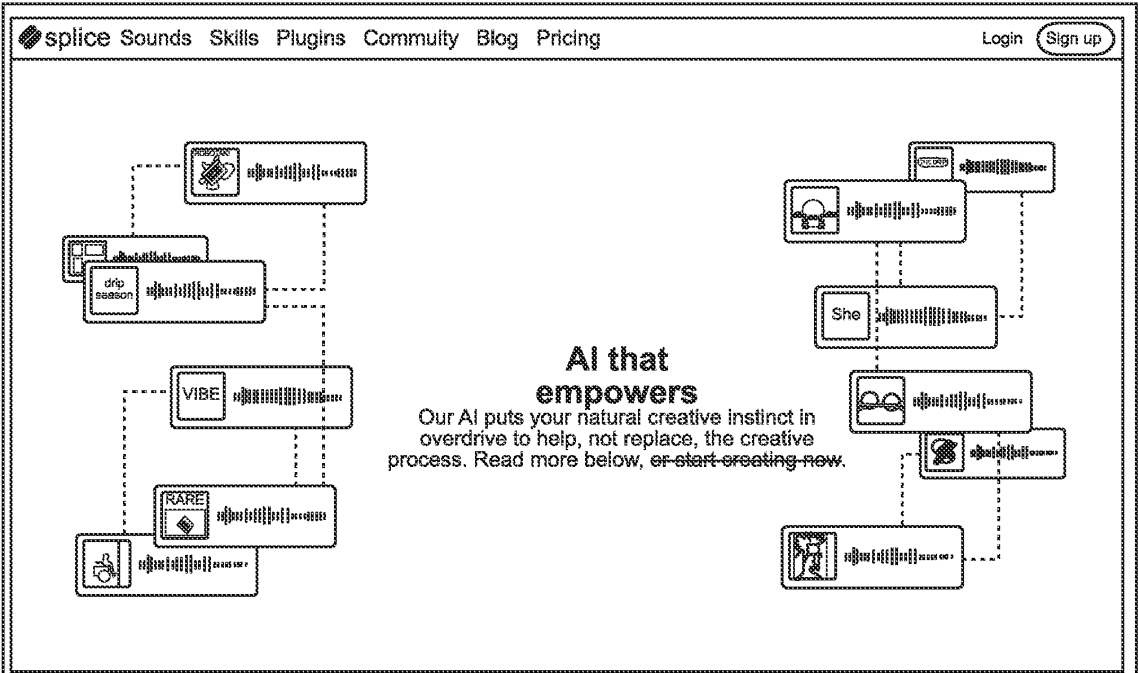


FIG. 6C
(PRIOR ART)

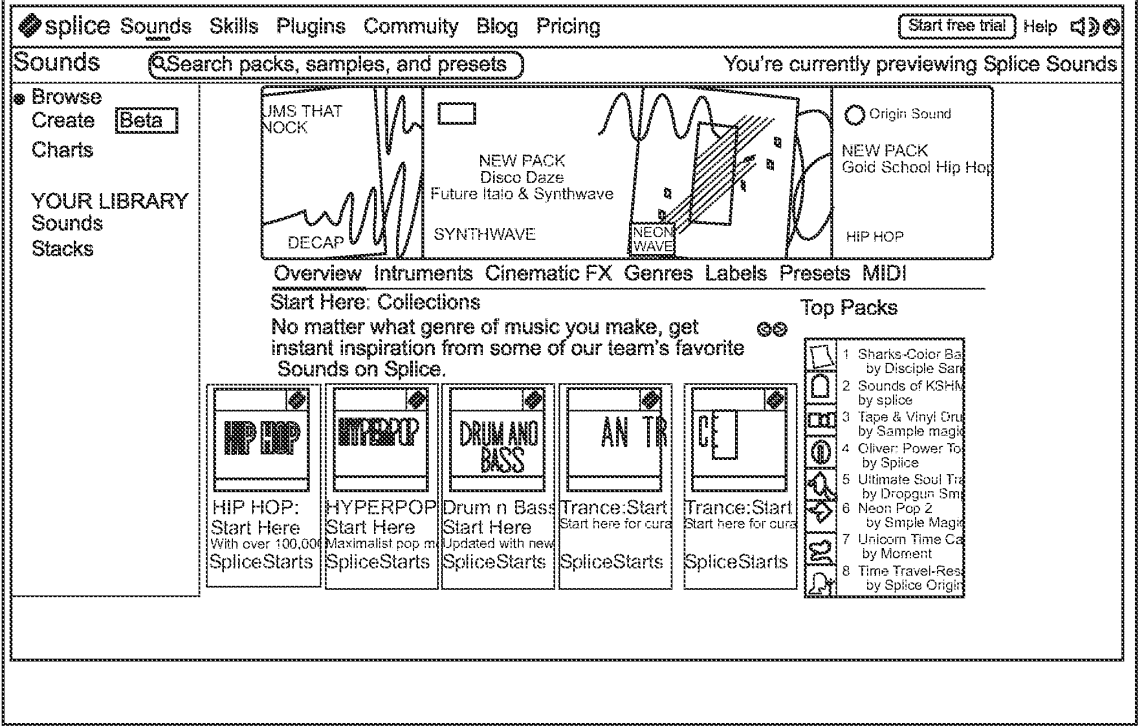


FIG. 6C2
(PRIOR ART)

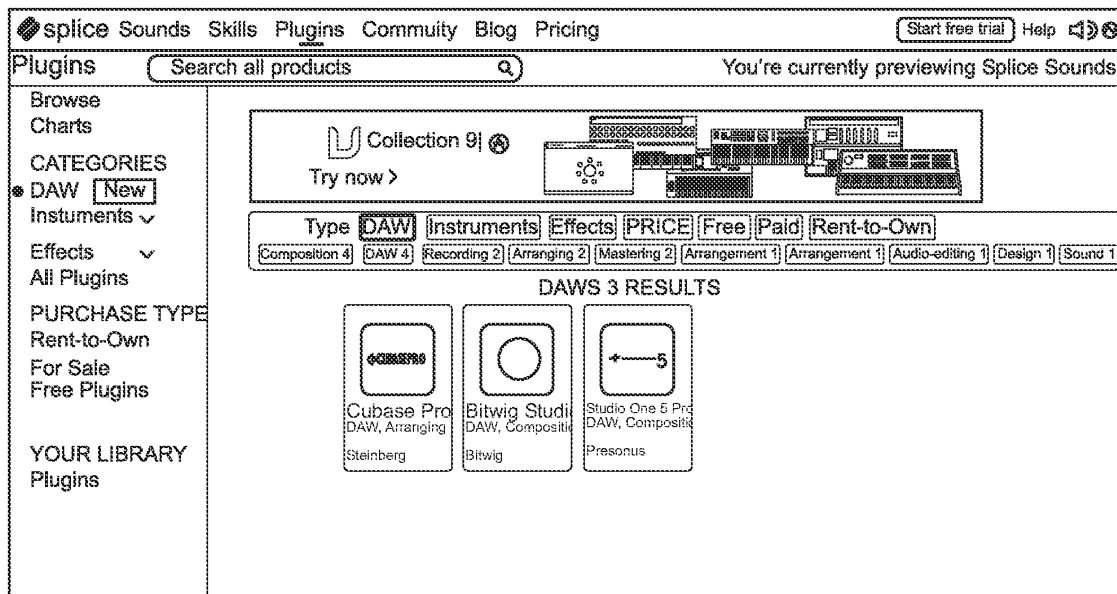


FIG. 6C3
(PRIOR ART)

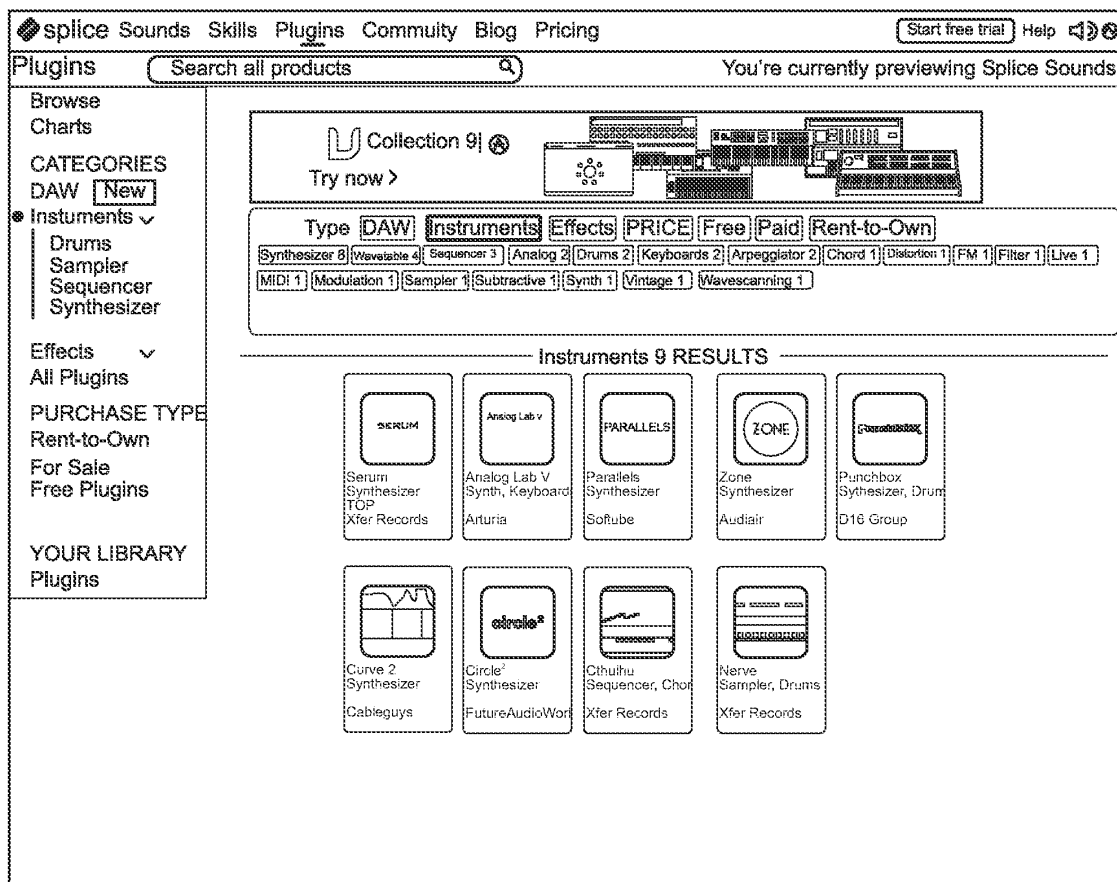


FIG. 6C4
(PRIOR ART)

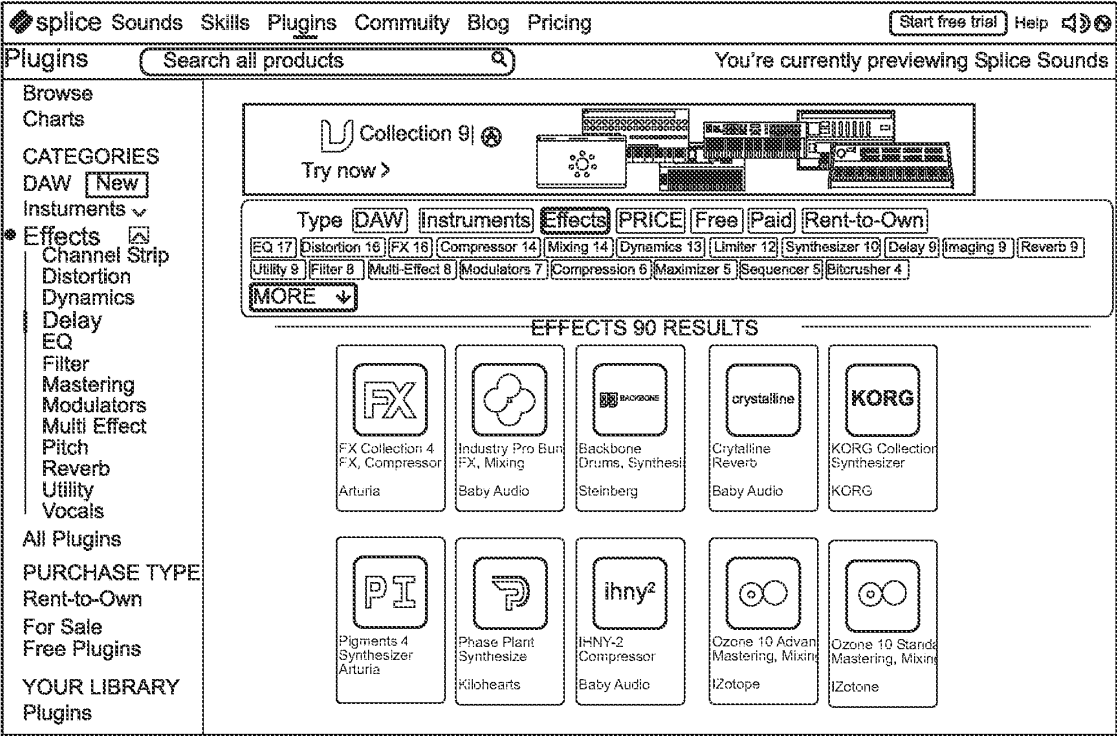


FIG. 6C5
(PRIOR ART)

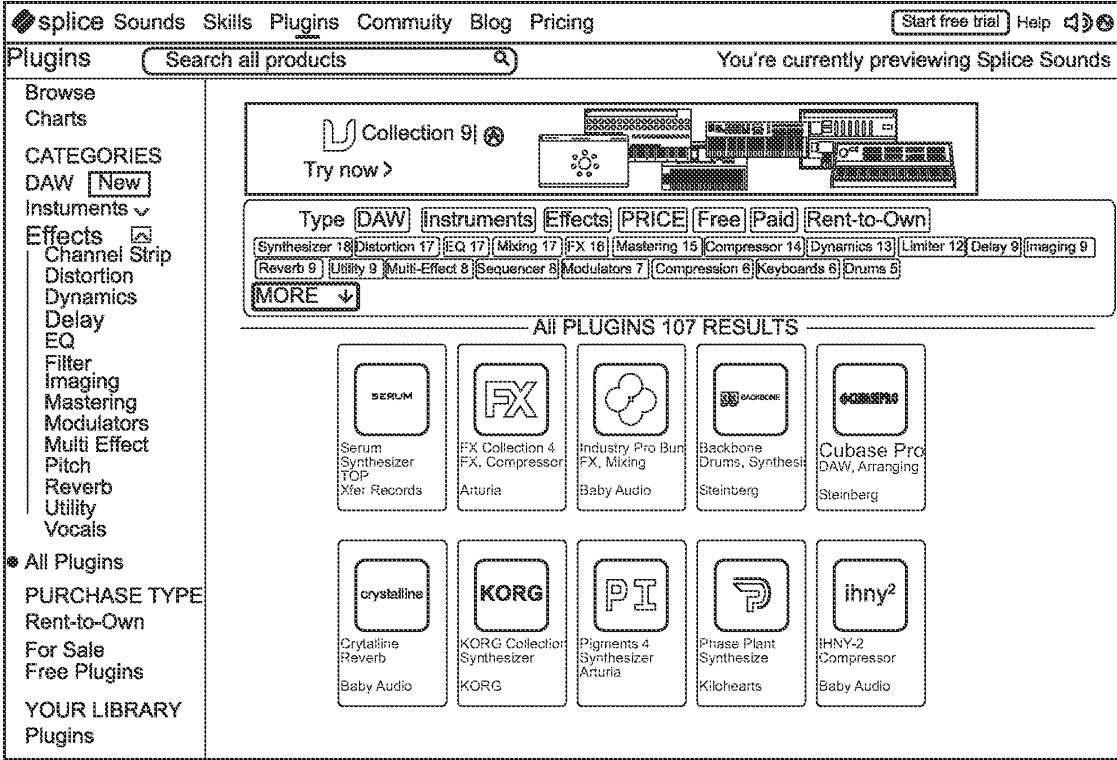


FIG. 6C6
(PRIOR ART)

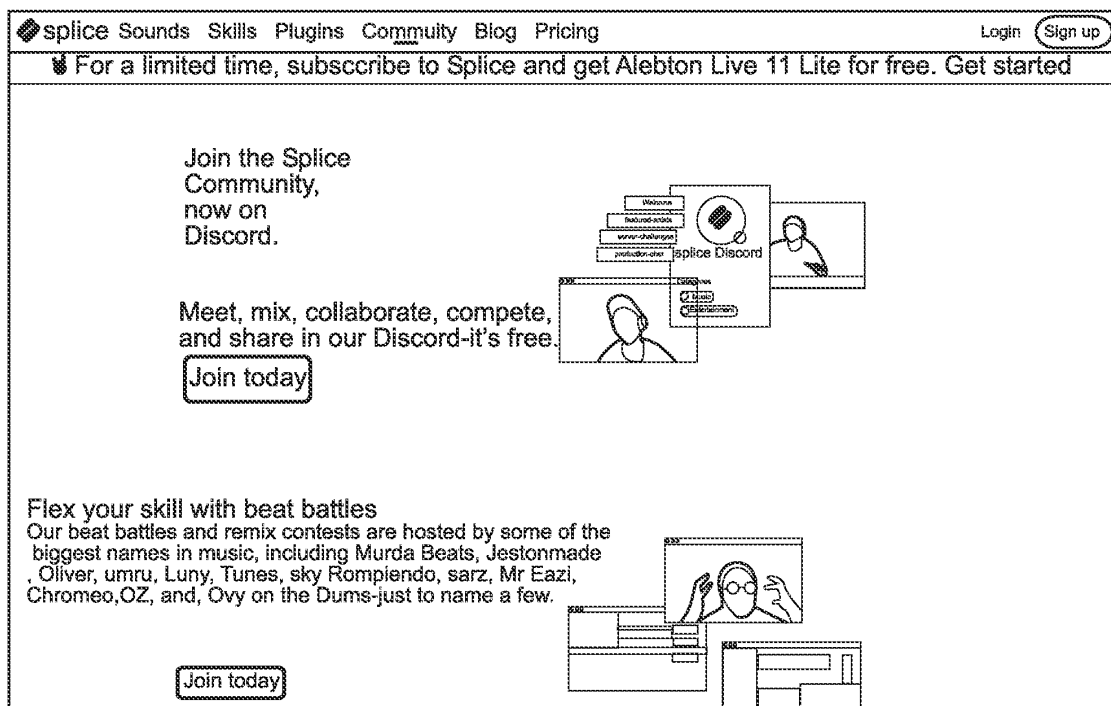


FIG. 6C7
(PRIOR ART)

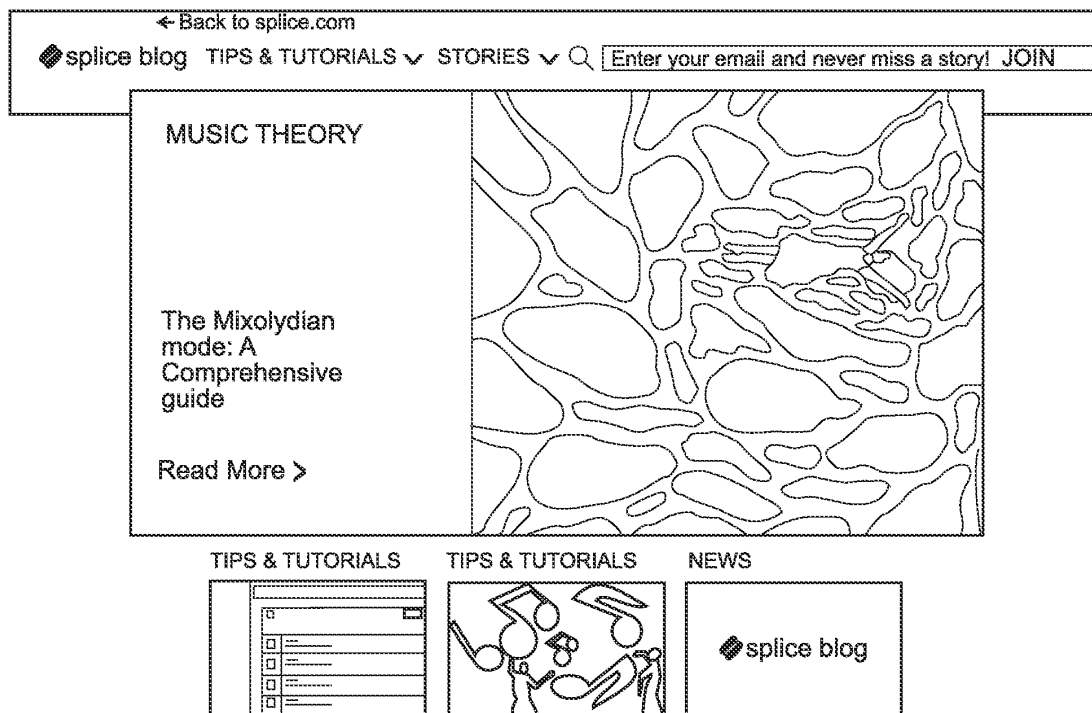


FIG. 6C8
(PRIOR ART)

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	Sounds+	Creator	Creator+
Monthly sample download credits ^①	100	200	500
Monthly price	\$12.99	19.99	39.99
Desktop and mobile apps ^①	✓	✓	✓
Preview sounds in your DAW with Bridge ^①	✓	✓	✓
Beatmaker drum machine plugin ^①		✓	✓
Astra synth plugin ^①		✓	✓

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How does Splice work?

- Get new credits every month to purchase samples, presets, and MIDI.
- 1 sample = 1 credit. Presets and MIDI cost between 1-3 credits.
- Unused credits roll over to the next month.

<

SOUNDTRAP® Web-based DAW Portal

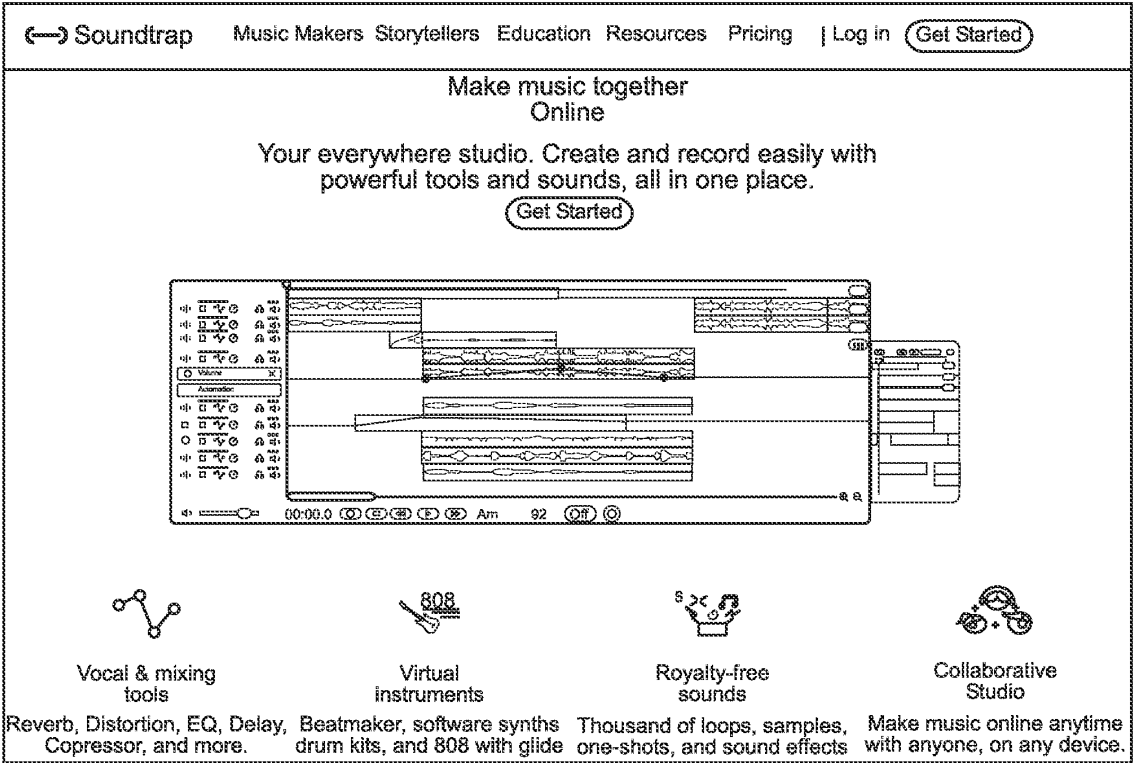


FIG. 6D
(PRIOR ART)

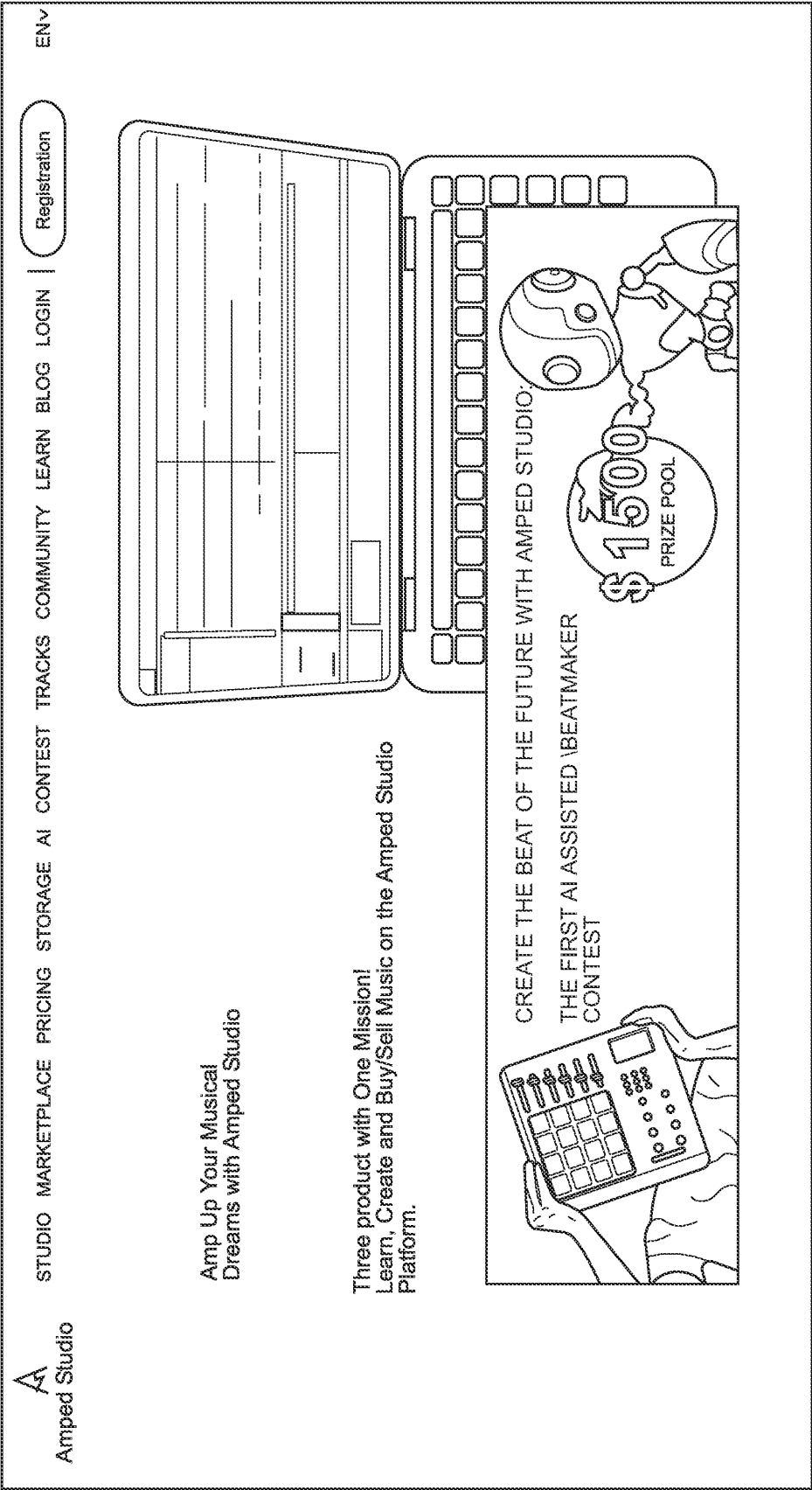


FIG. 6E1
(PRIOR ART)

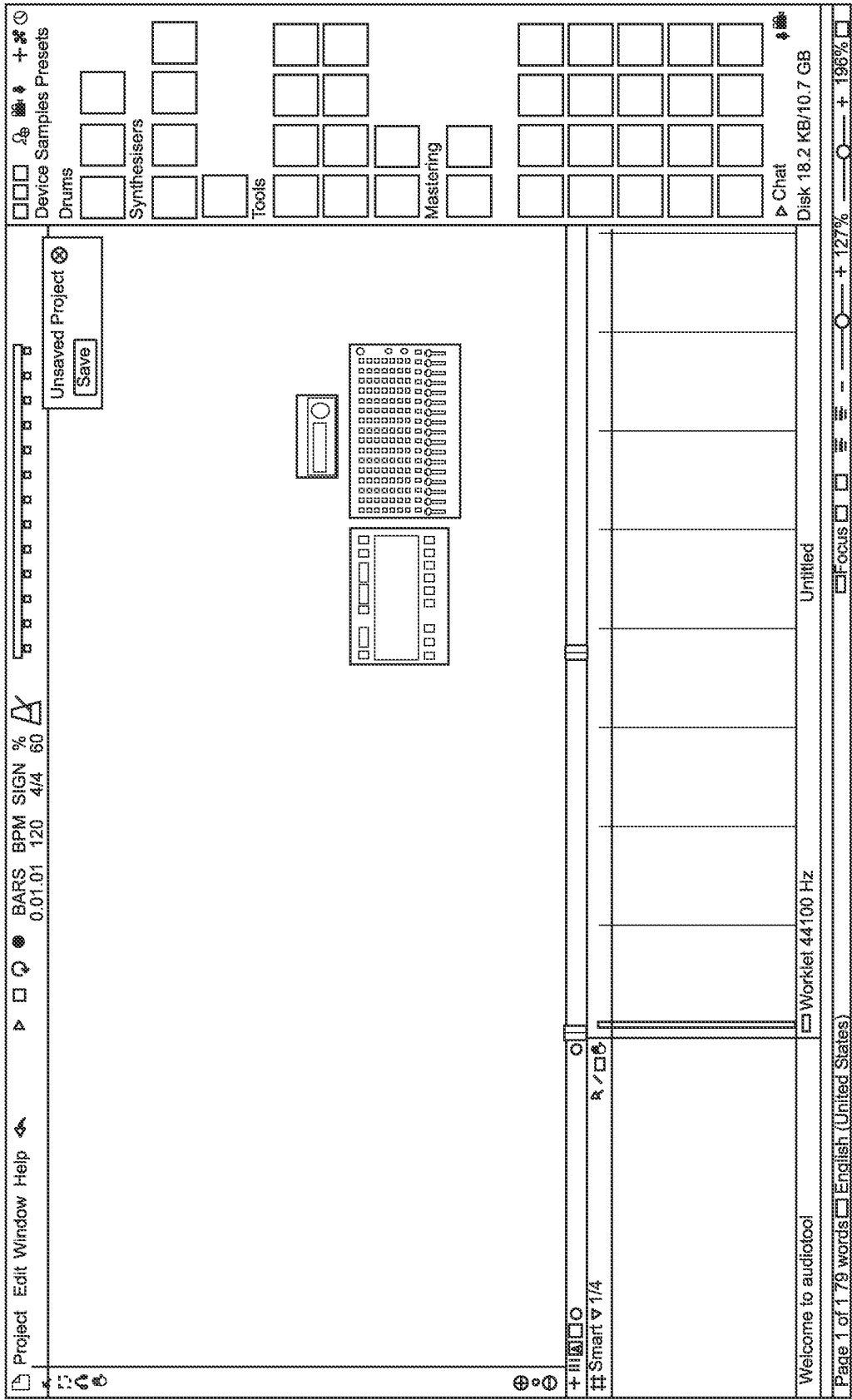


FIG. 6E2
(PRIOR ART)

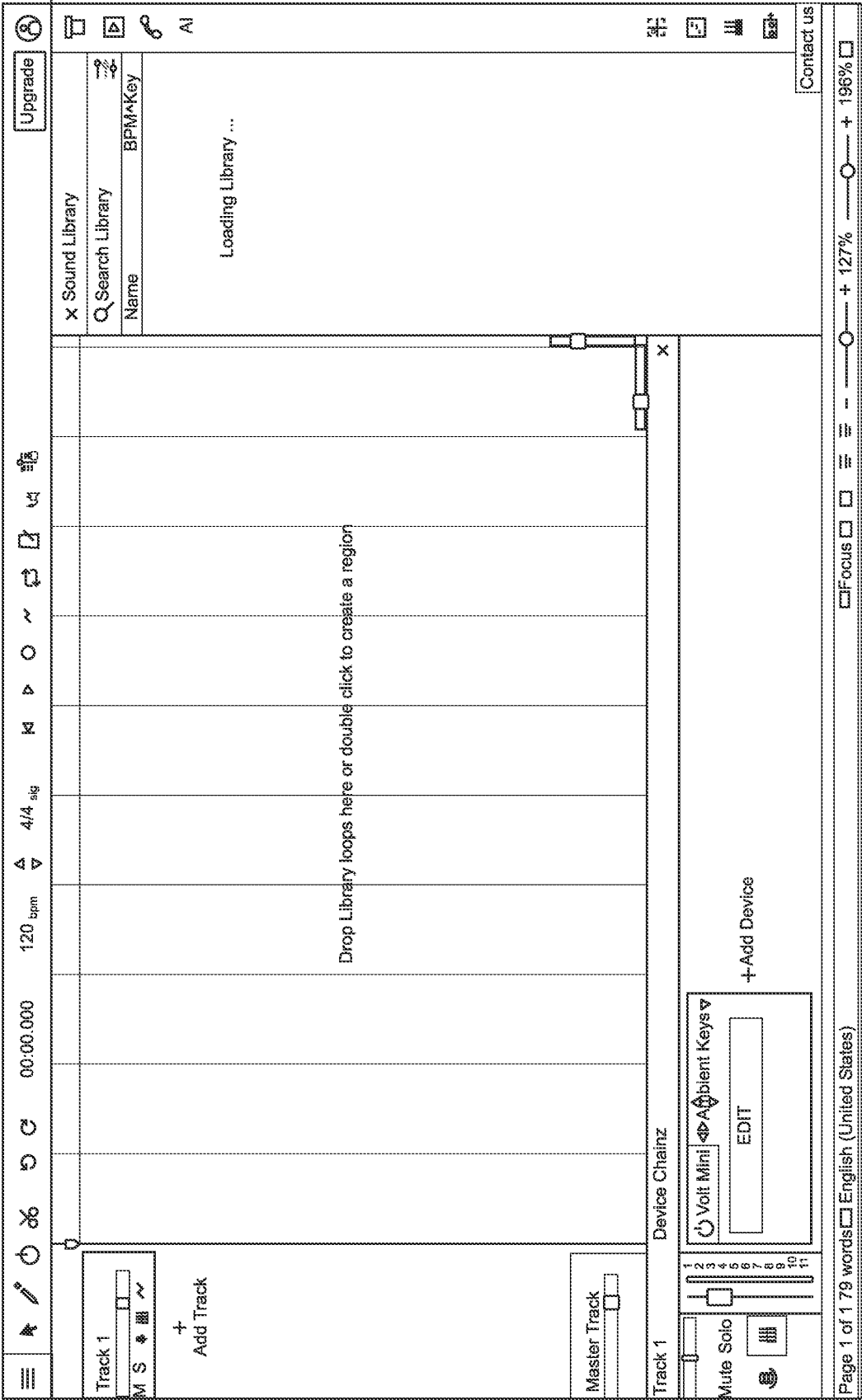
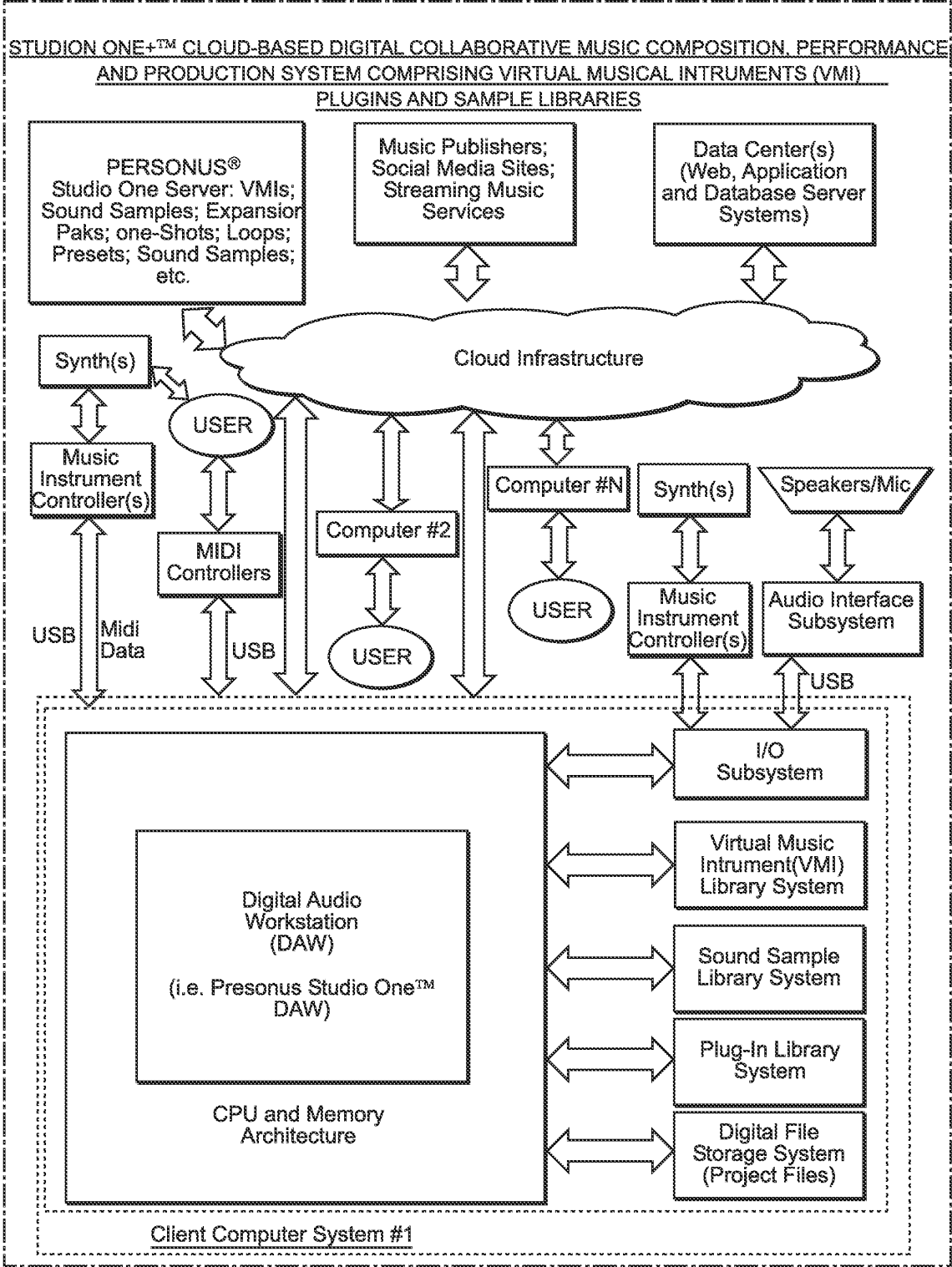


FIG. 6F
(PRIOR ART)



CASE #6

FIG. 6G
(PRIOR ART)

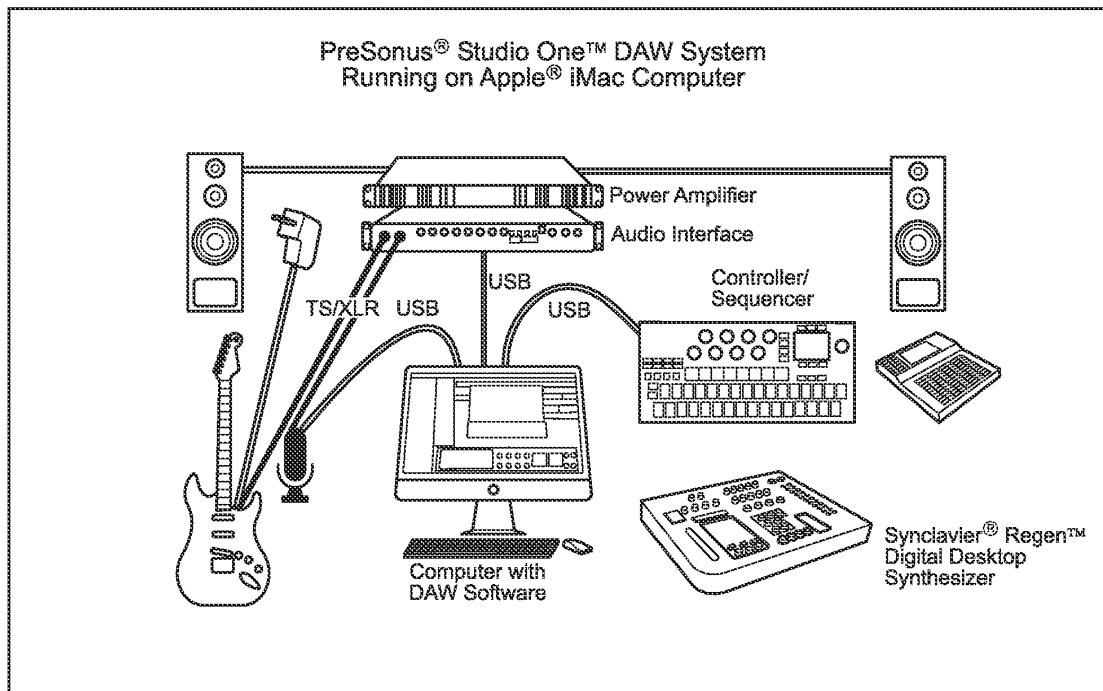


FIG. 6G1
(PRIOR ART)

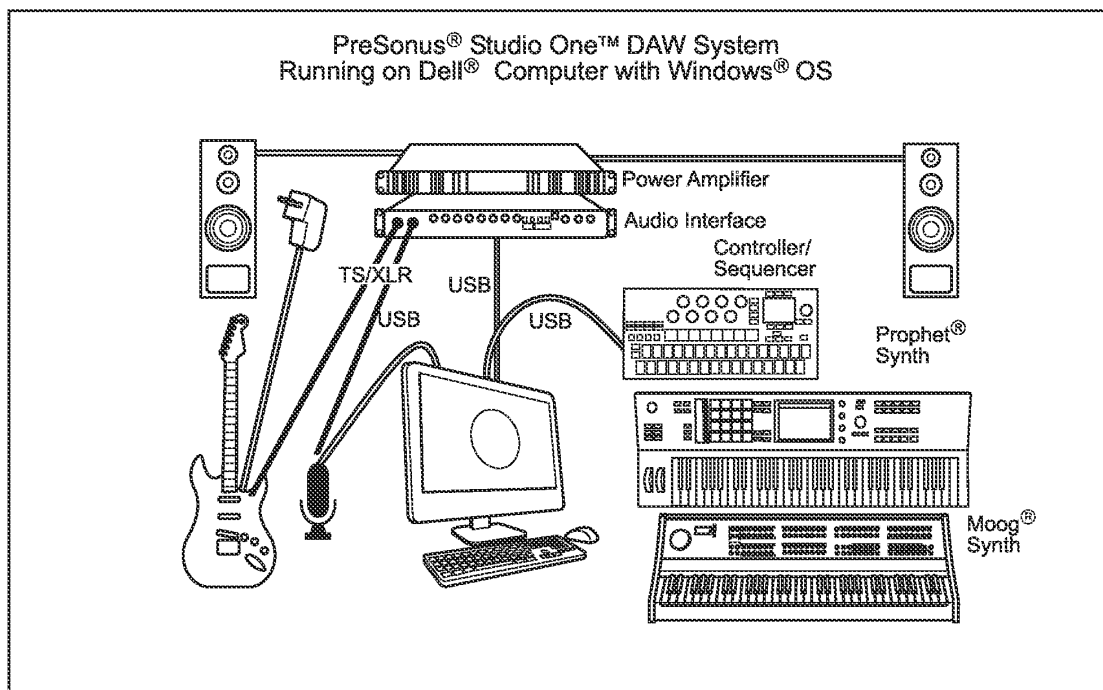


FIG. 6G2
(PRIOR ART)

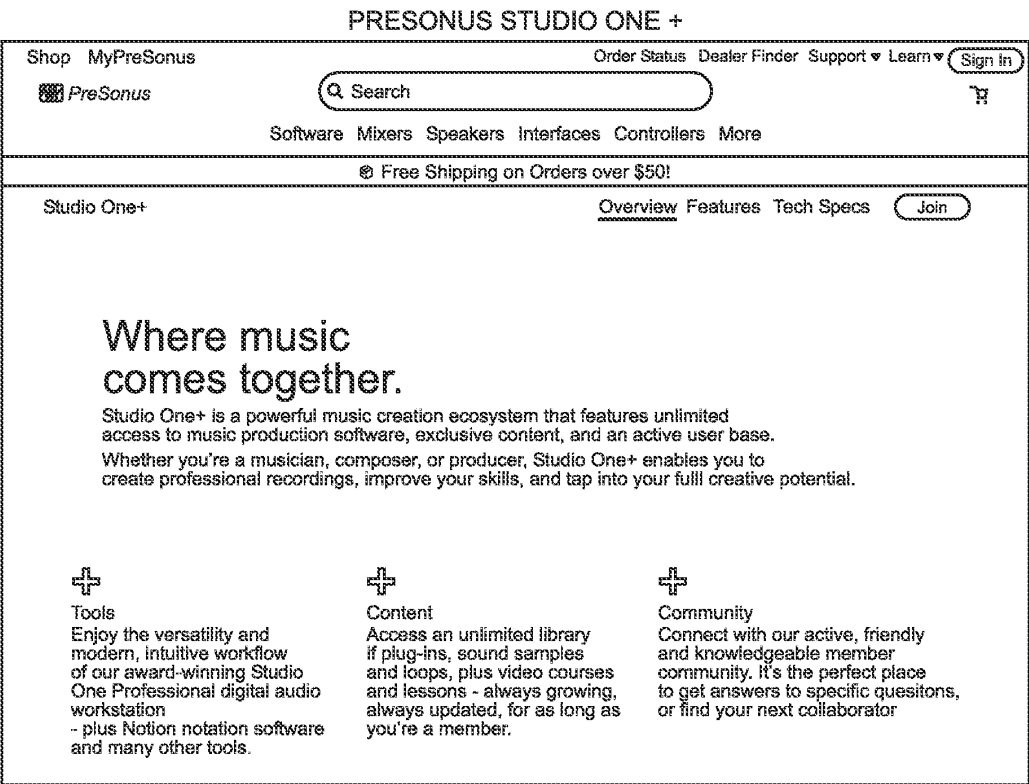


FIG. 6G3
(PRIOR ART)

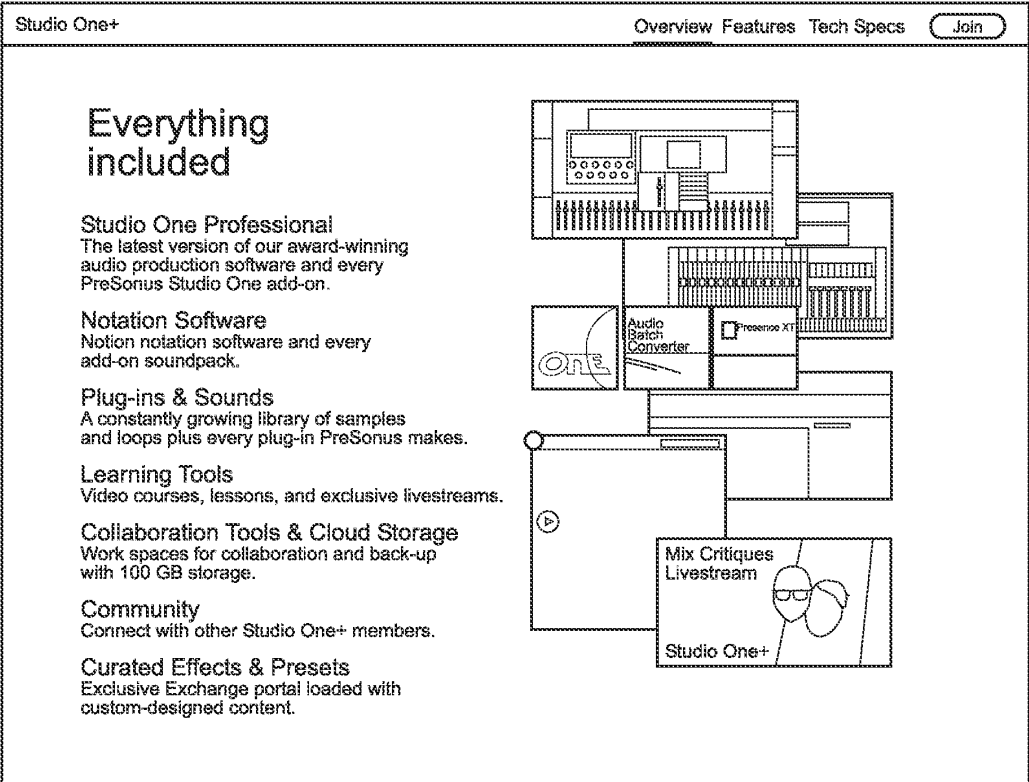


FIG. 6G4
(PRIOR ART)

PRESONUS STUDIO ONE +

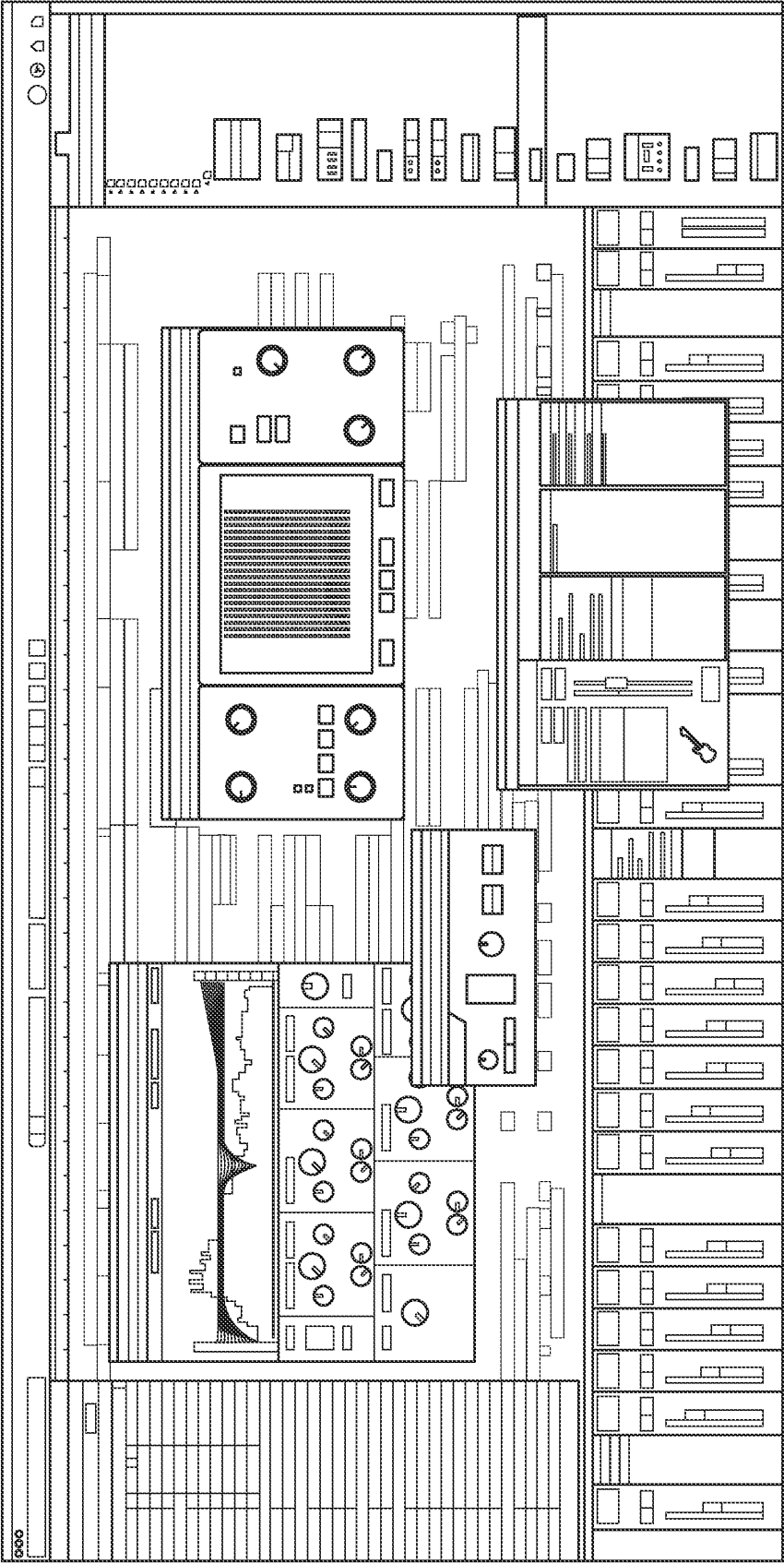


FIG. 6G5
(PRIOR ART)

PRESONUS STUDIO ONE +

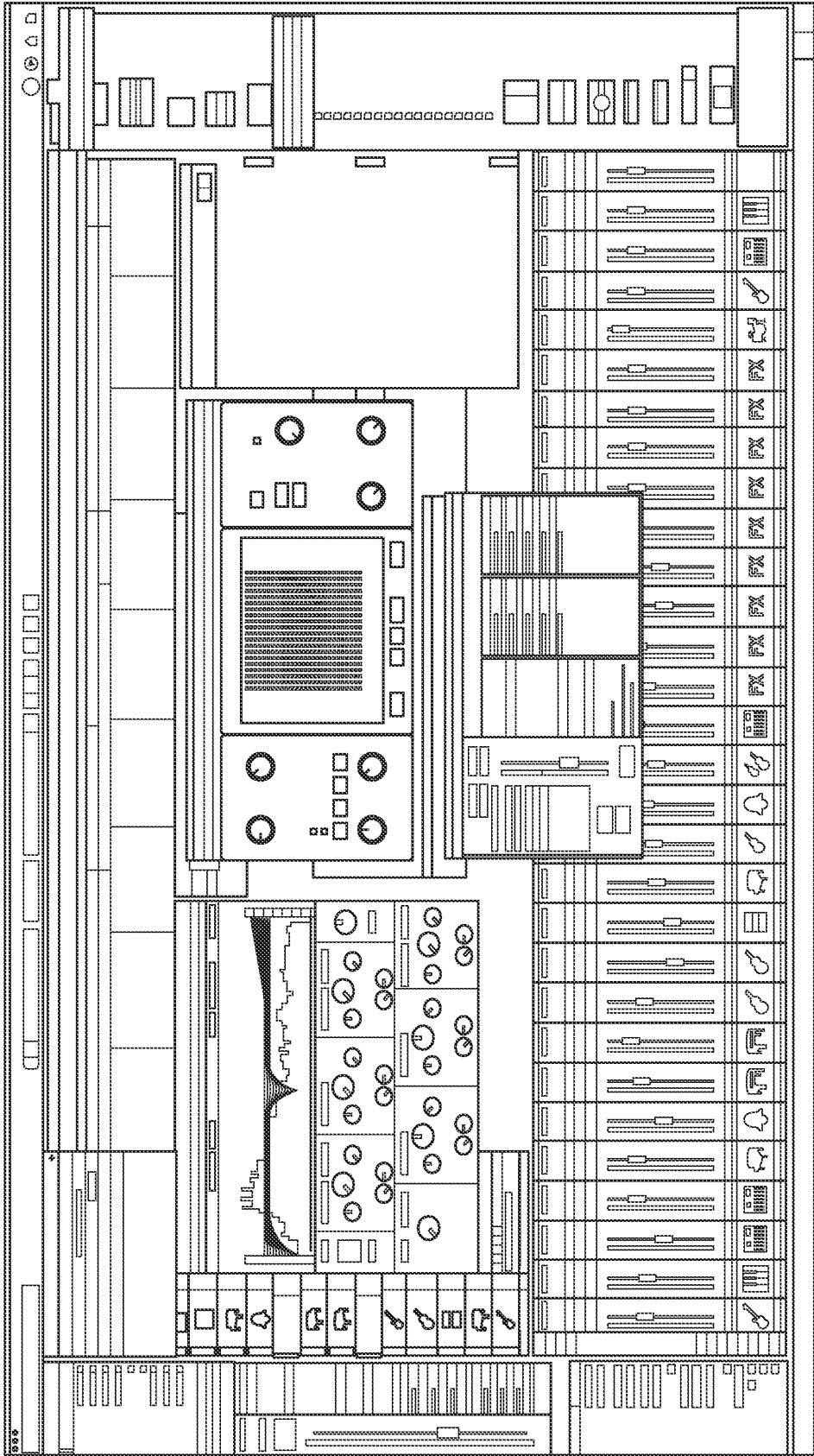


FIG. 6G6
(PRIOR ART)

Prior Art AI-Tools (Plugins) For
Music Composition, Performance, And Production

Rapid Composer® Plugin Music Composition Tools
Captain Epic® Plugin Music Composition Tools
ORB Producer Pro® Plugin Music Composition Tools
Chord Composer® Music Composition Plugin Tool
Tik Tok Ripple™ Hum-to-Song Generator
Mawf™ Sound-to-Synth Generator
BandLab® SongStarter – AI Song Composer

AIVA® Music Composer
Magenta Studio – Tensor Flow Plugins
Continue;
Generate 4 Bars;
Drumify Plugin;
Interpolate Plugin;
Groove Plugin;
DDSP – Vocal to Instrument Tool
Open AI – JUKEBOX AI-Generative Music Project

AudioCipher® AI Melody/Chord Generator
LyricStudio AI Lyric Generator by Wave AI, Inc.
MelodyStudio AI melody generator by Wave AI, Inc.

BandLab® AI Music Song Splitter
LALAL.AI AI Music Stem Splitter
Amper® AI-Music Composition and Generation System
JukeDeck™ AI-Music Composition and Generation System

Waves® Tune REAL-TIME – Automatic Vocal Tuning and Creative Effects
DreamTronics Solaris – Singer Vocal Instrument
Vocaloid – Vocal Instrument
Istotope® OZONE™ AI-Based Audio Mixing Software
Sonible/FocusRite – Balancer AI Plug-In
Smart Verb™ AI-Powered Reverb Engine

FIG. 7
(PRIOR ART)

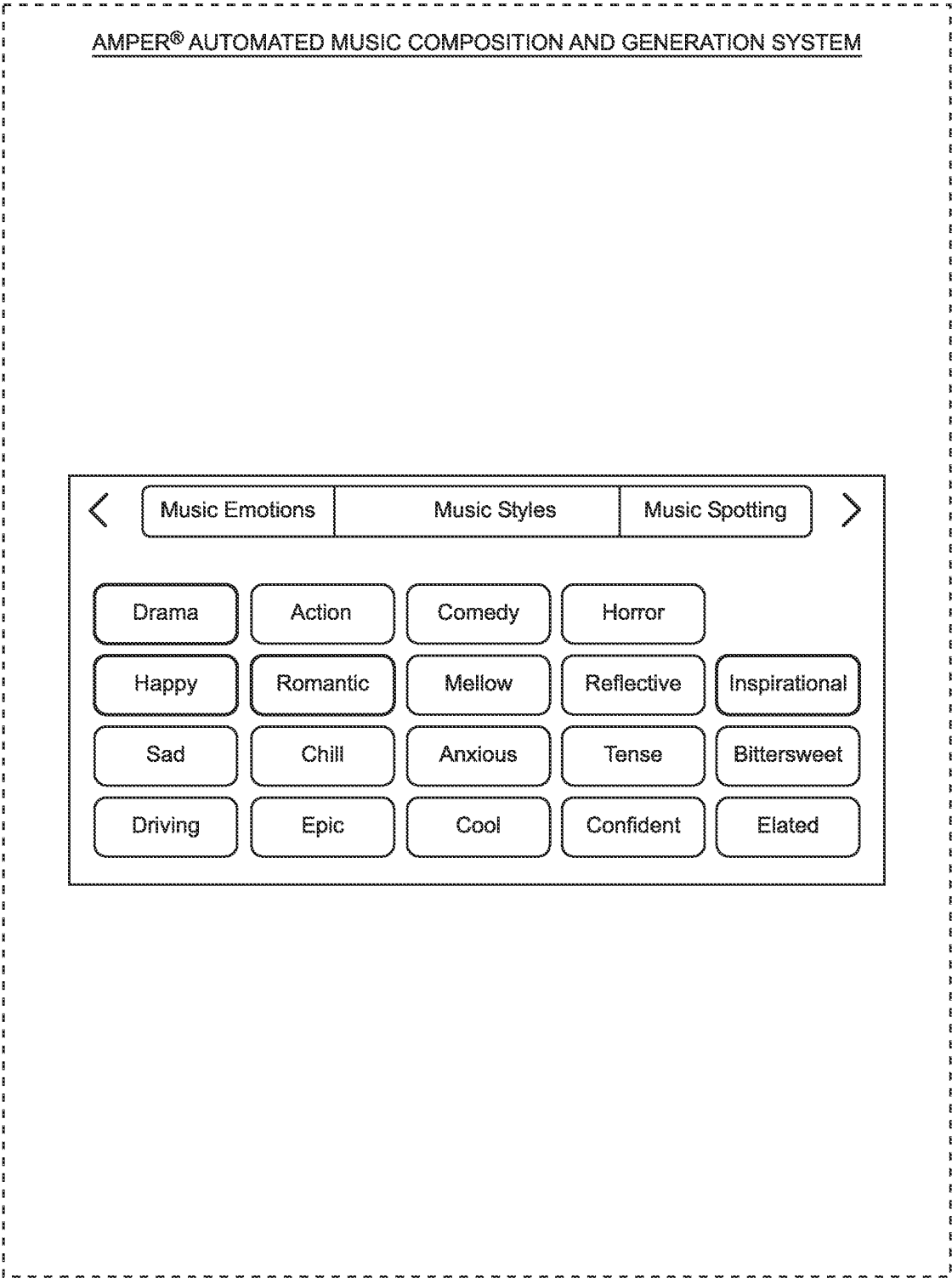


FIG. 8
(PRIOR ART)

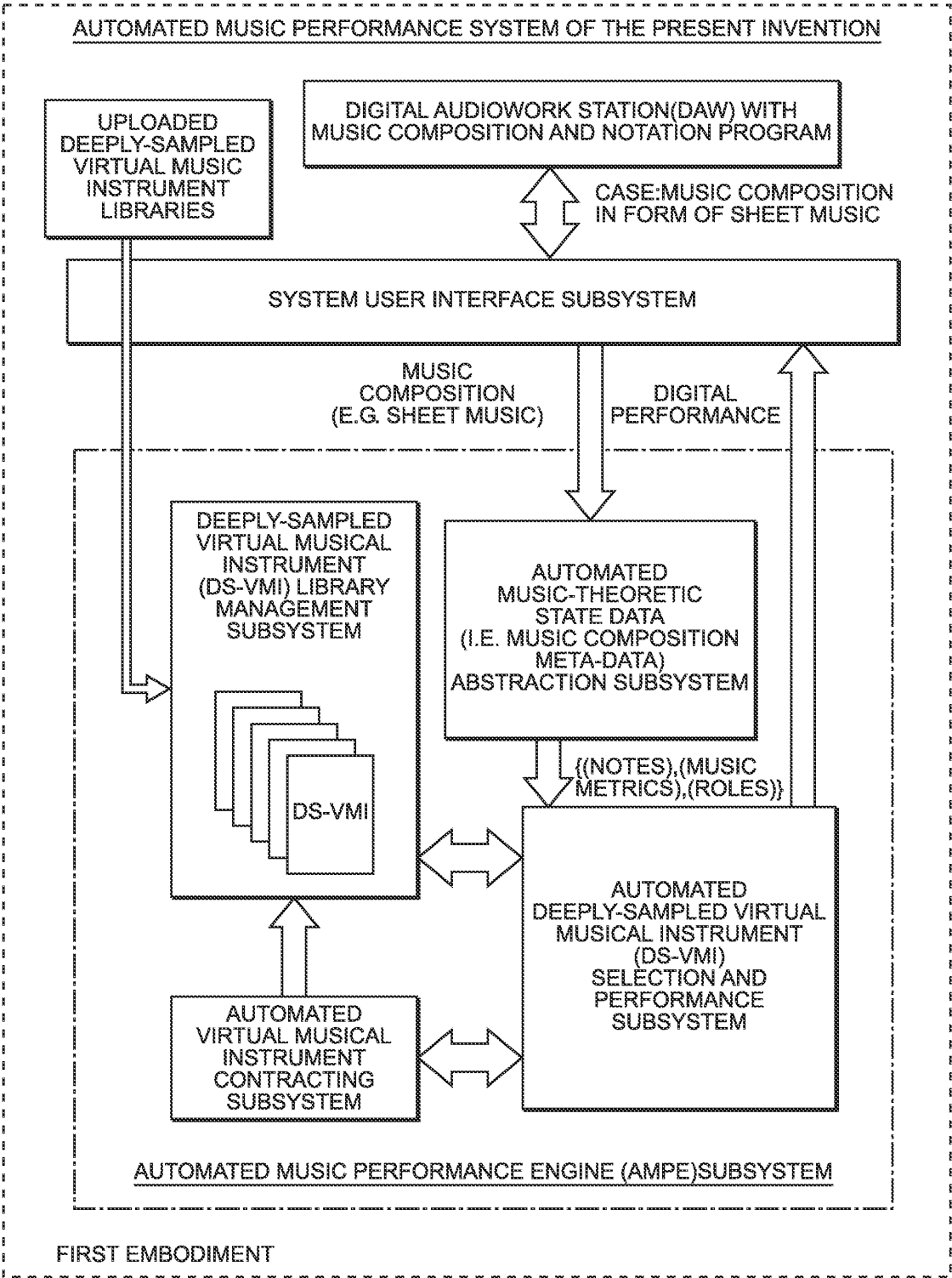


FIG. 9
(PRIOR ART)

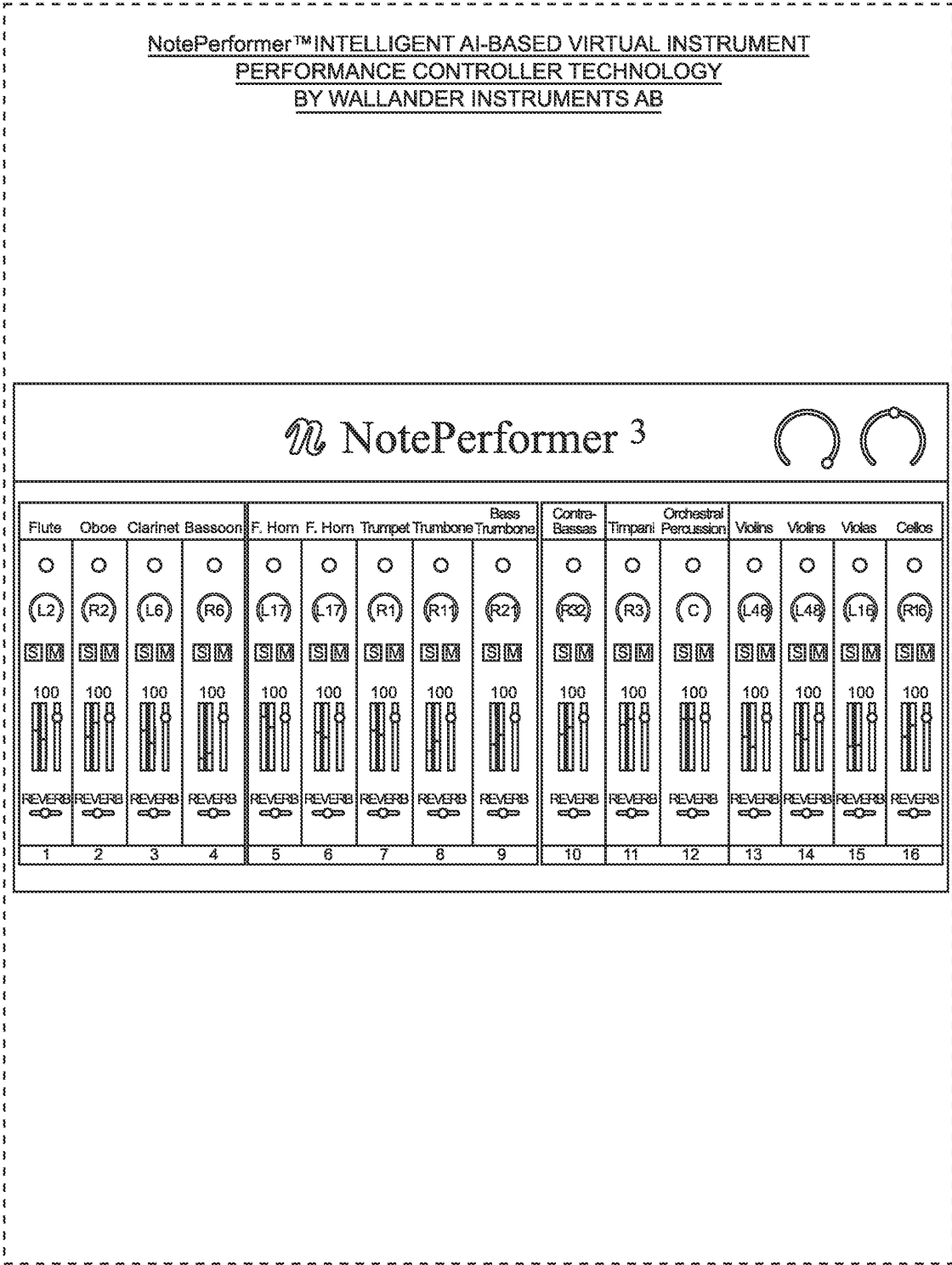


FIG. 10
(PRIOR ART)

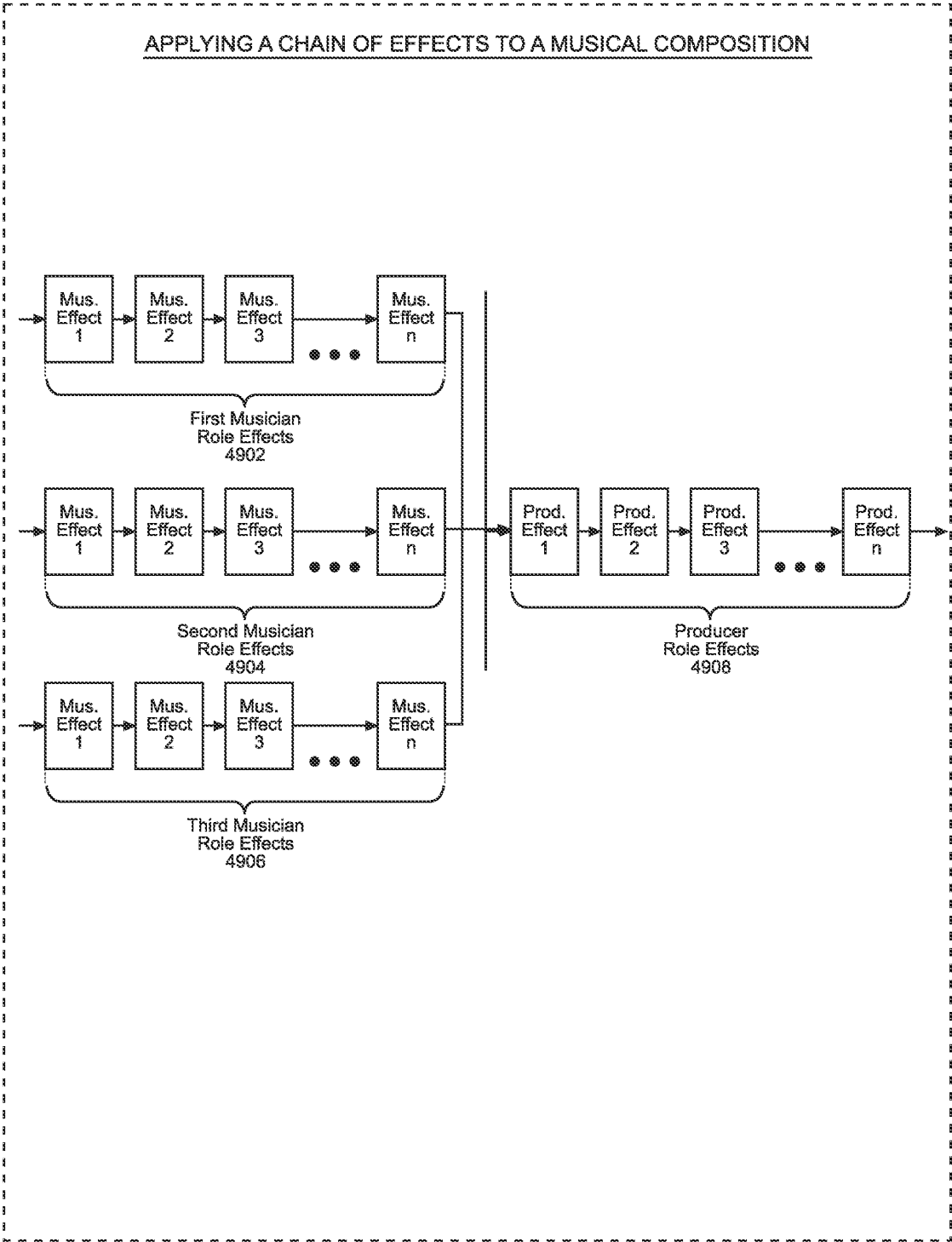


FIG. 11A
(PRIOR ART)

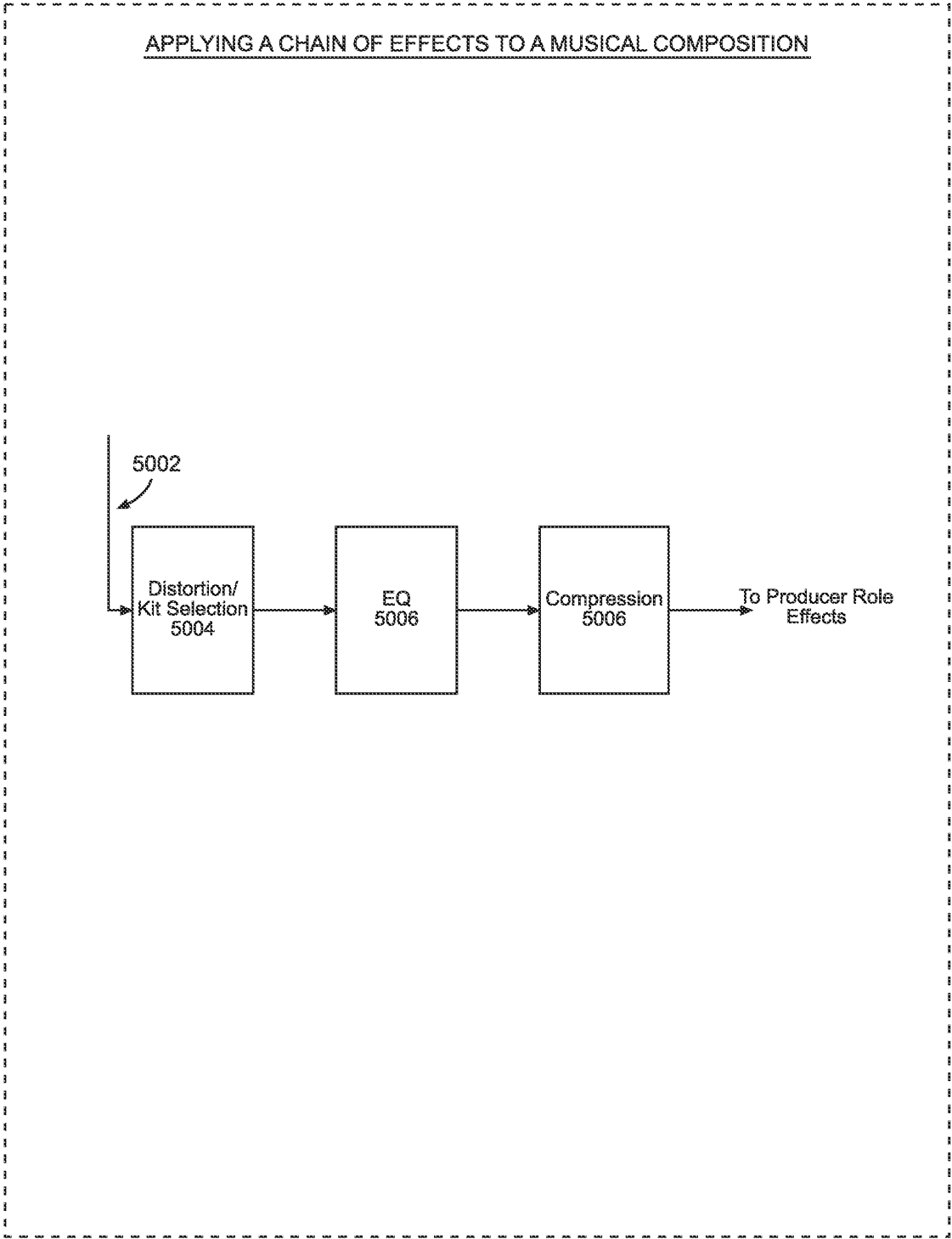


FIG. 11B
(PRIOR ART)



FIG. 11C
(PRIOR ART)

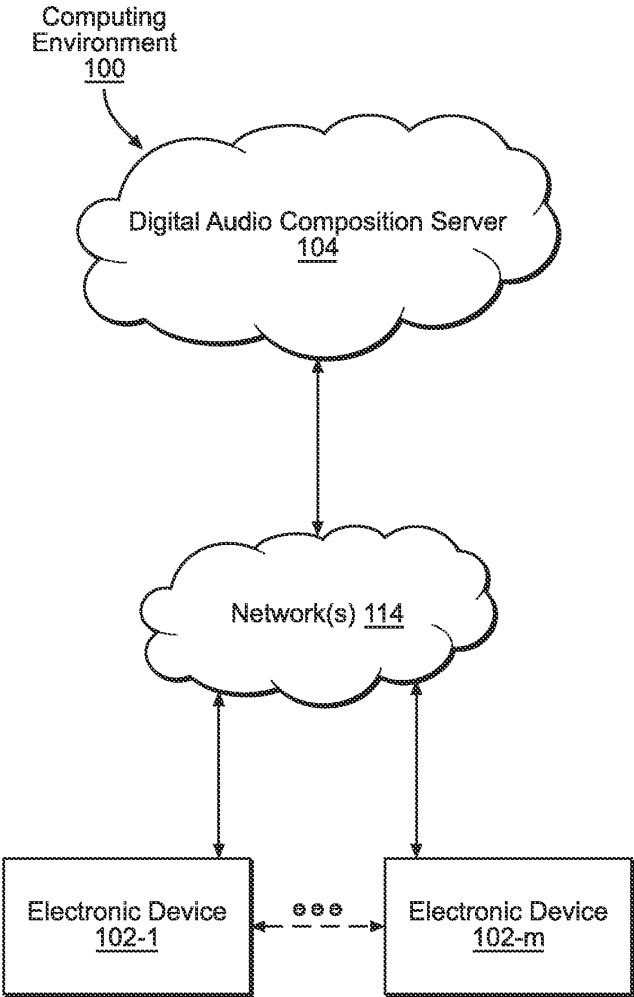


FIG. 11D1
(PRIOR ART)

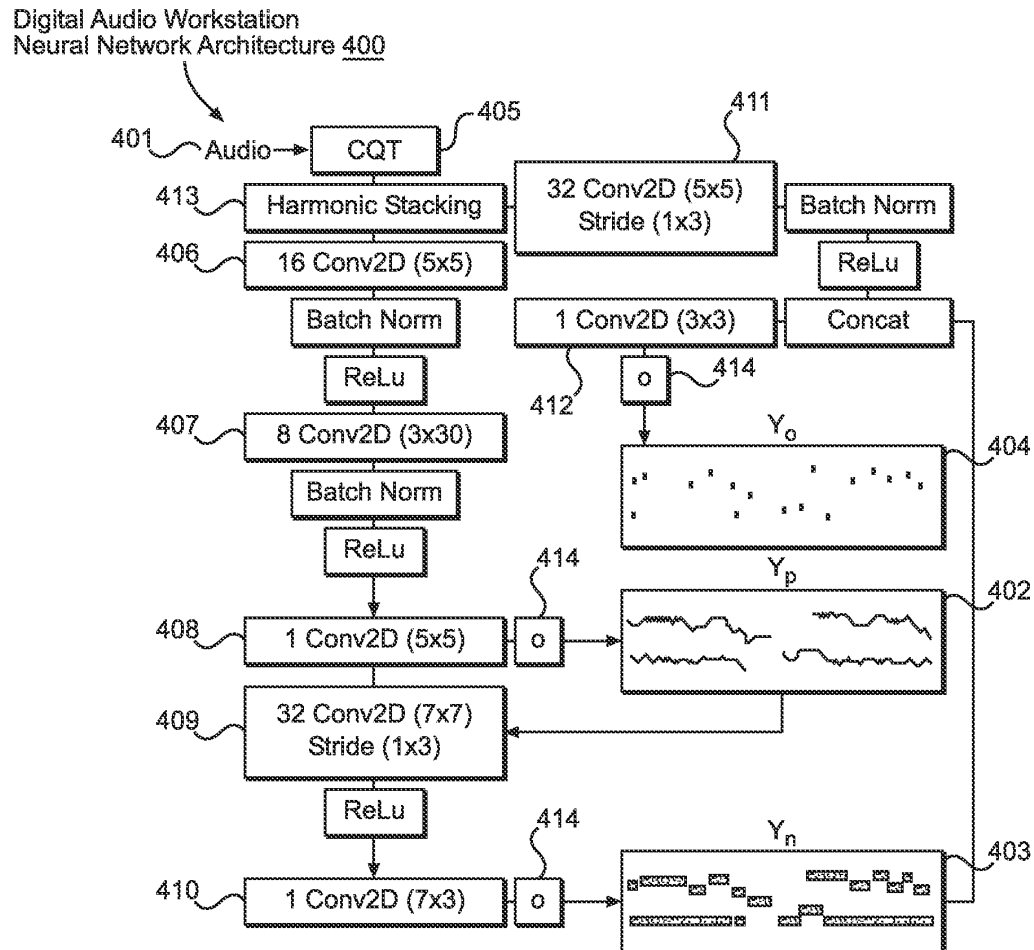
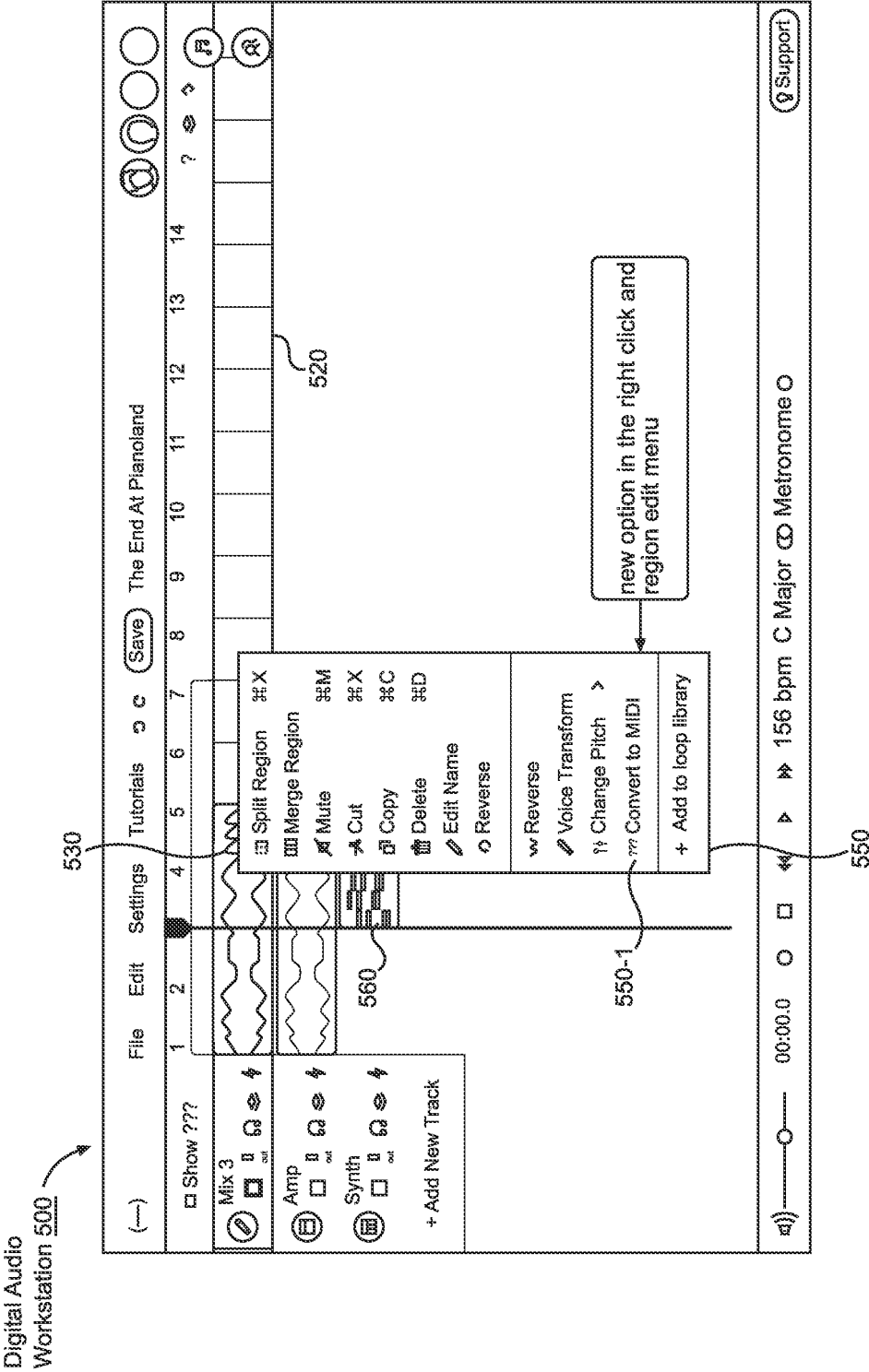


FIG. 11D2
(PRIOR ART)



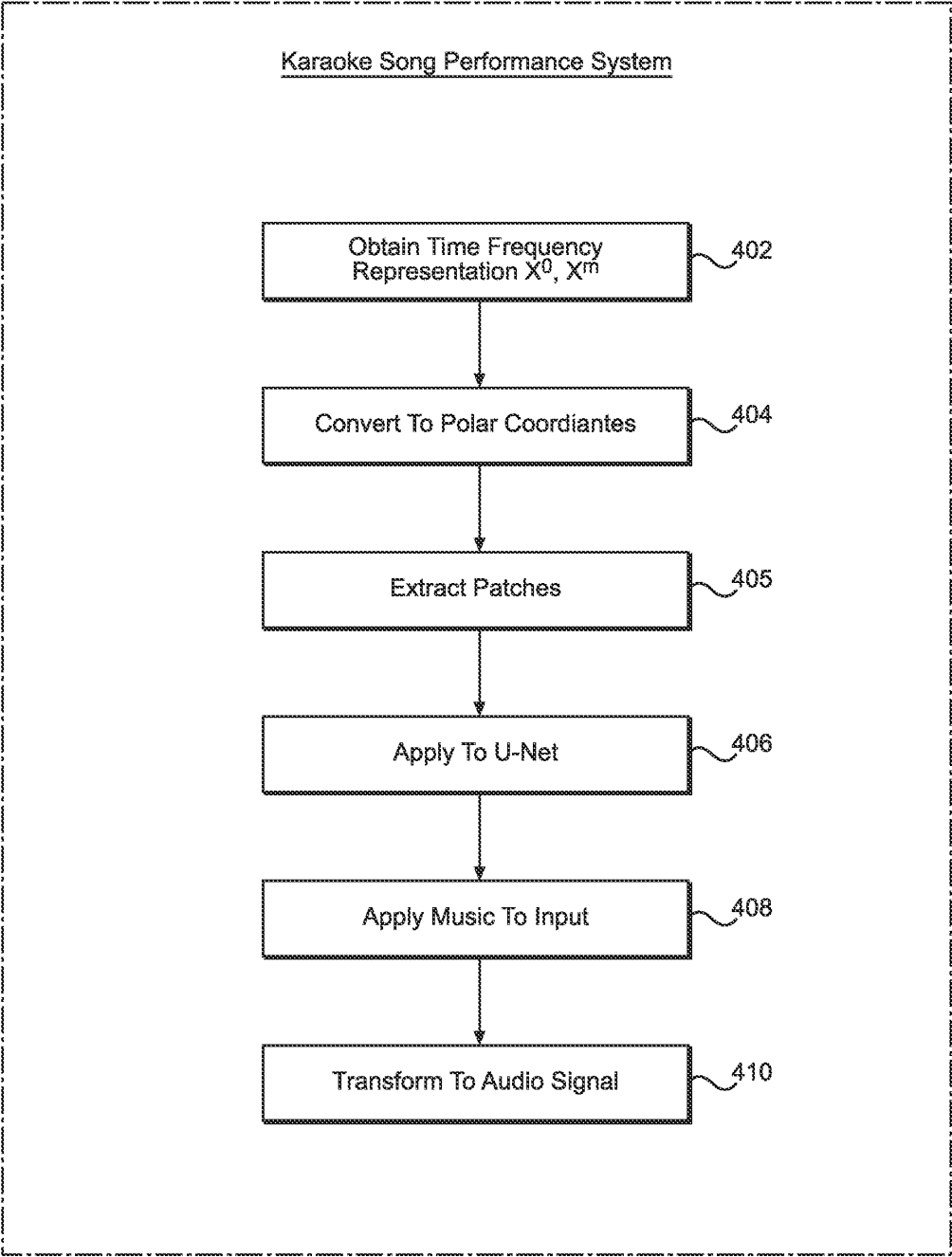


FIG. 11E
(PRIOR ART)

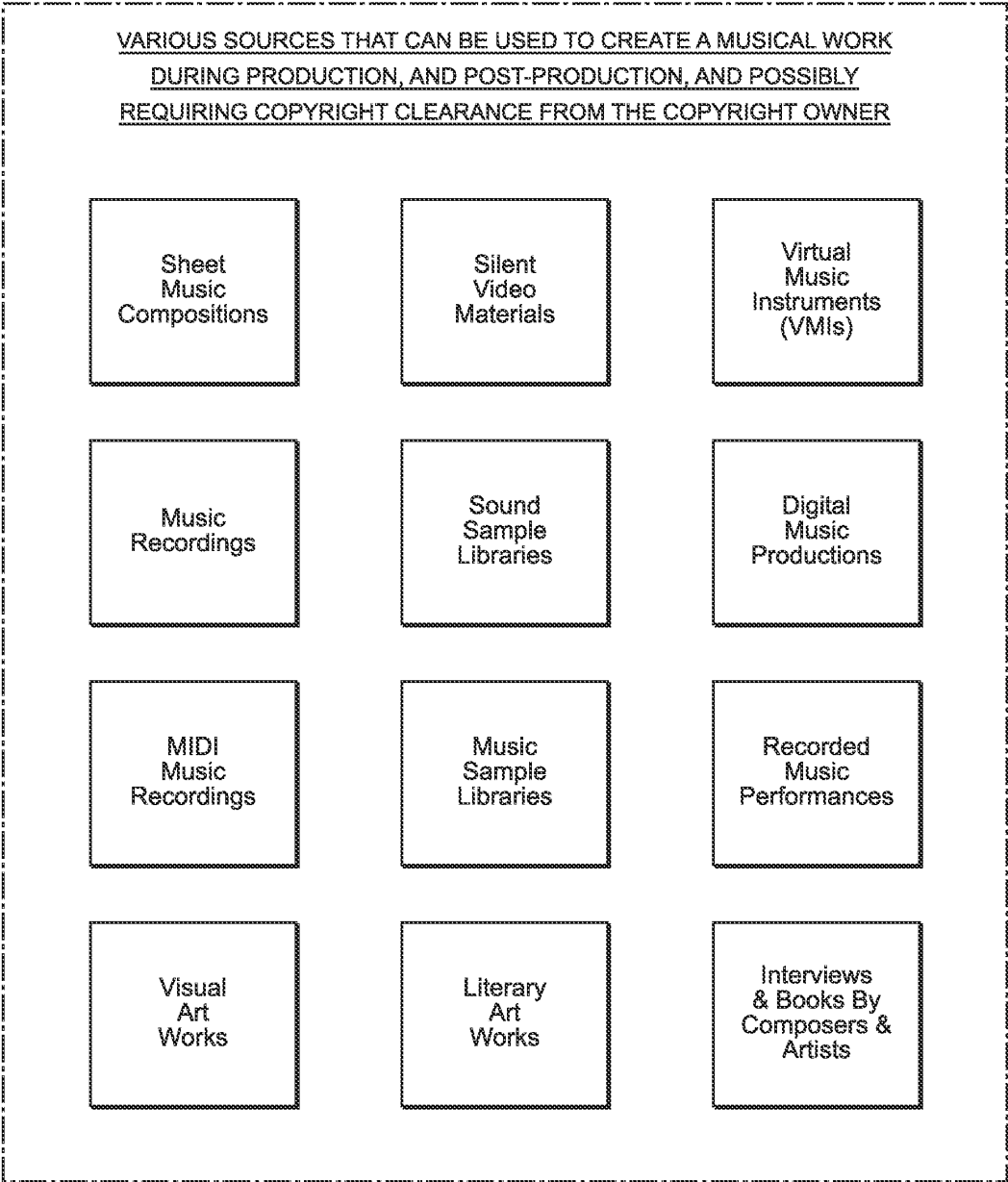


FIG. 12
(PRIOR ART)

**LEGAL ENTITIES CONTRIBUTING TO THE CREATION OF COPYRIGHT IN MUSIC
DURING EXEMPLARY MUSIC CREATION SCENARIOS**

Legal Entities Creating Copyrights When A Digital Music Production Is Produced In A Studio;

Composers Of Music Used In Producing The Music Production;
Producer(s) Of Music Using VMIs, Real Music Instruments, And/Or Vocals;
Producers Of Sampled Music/Beats Used In The Music Production;
Engineer(s) And Staff Involved In Recording The Music Production
Engineer(s) And Staff Involved In Mixing/Editing The Music Production
Engineer(s) And Staff Involved In Mastering The Music Production

Legal Entities Creating Copyrights When A Digital Music Performance Is Recorded In A Music Recording Studio;

Performer(s) Of Music Using Instruments;
Composers Collaborating In The Digital Music Performance;
Engineer(s) And Staff Involved In Digital Music Performance Recording Process;
Engineer(s) And Staff Involved In Mixing/Editing The Digital Music Performance
Engineer(s) And Staff Involved In Mastering The Recorded Digital Music Performance

Legal Entities Creating Copyrights When A Digital Music Performance Is Recorded In A Performance Hall Or Music Recording Studio;

Composer(s) Of The Music Performed Live In Studio Before A Live Audience;
Performer(s) Of Musical Instrument(s);
Engineer(s) And Staff Involved In Live Music Recording Process;
Engineer(s) And Staff Involved In Mixing/Editing Musical Audio Recording
Engineer(s) And Staff Involved In Mastering Of The Recorded Live Music Performance

Legal Entities Creating Copyrights When A Music Composition Is Recorded In Sheet Music Format Or MIDI Music Notation;

Composer(s) Of Musical Pieces In The Music Composition;
Composer(s) Of Sampled Music Pieces Used In The Music Composition
Editor(s) Involved In Music Notation
Scriber(s) Involved In Producing Music Score Sheets

FIG. 13A
(PRIOR ART)

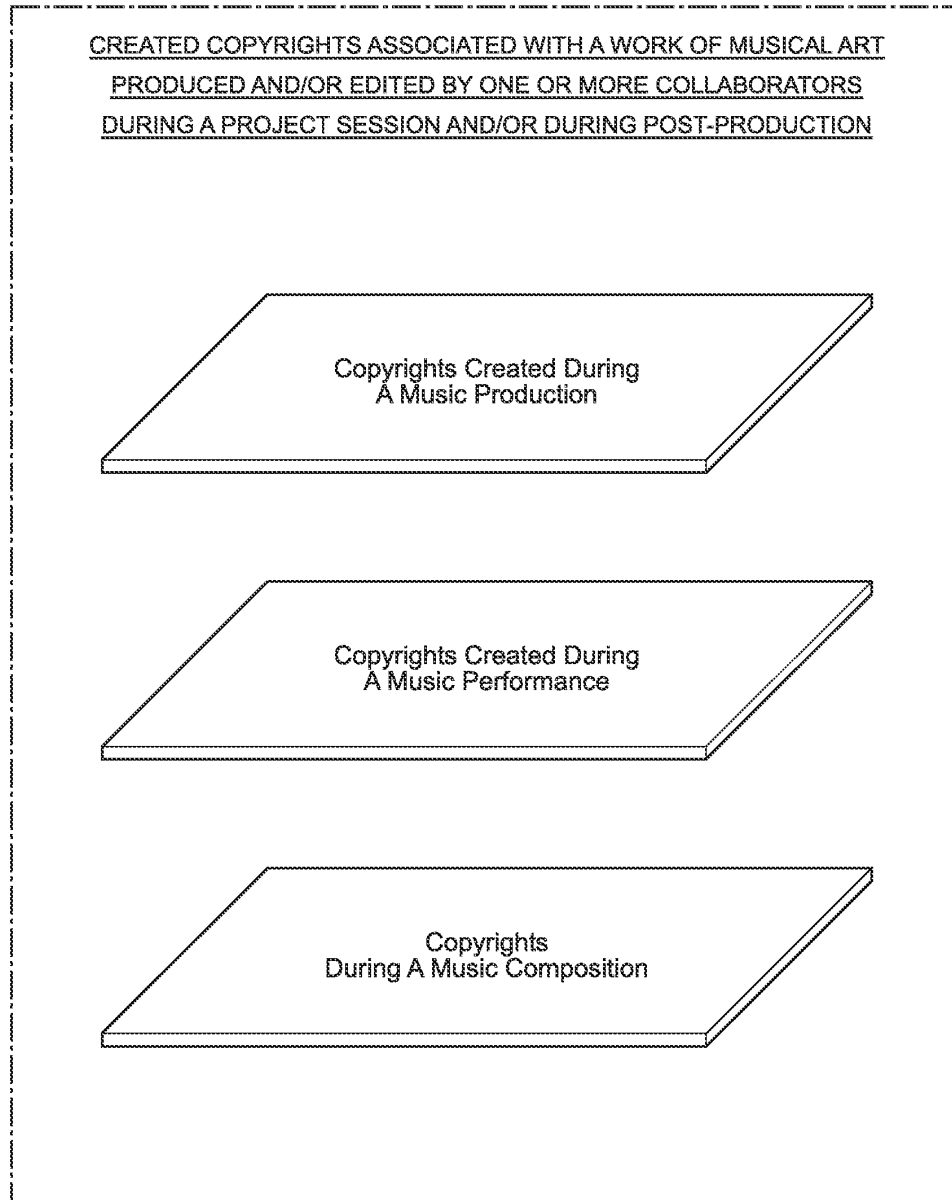


FIG. 13B
(PRIOR ART)

UMG's RESPONSE TO AI-GENERATED MUSIC

FACT:

AI services are trained on existing copyrighted music in order to generate new content, and this is becoming a subject of increasing concern for rightsholders such as UMG, according to the *Financial Times*.

The FT reports (<http://www.ft.com/content/aec1679b-5a34-4dad-9fc9-f4d8cdd124b9>) having seen emails sent to platforms by UMG last month, in which it wrote: "We will not hesitate to take steps to protect our rights and those of our artists"

Additionally, the music company reportedly told streaming services in March: "We have become aware that certain AI systems might have been trained on copyrighted content without obtaining the required consents from, or paying compensation to, the rightsholders who own or produce the content".

FIG. 14A
(PRIOR ART)

CHINA'S RESPONSE TO GENERATED AI

Over in China, the government has drawn up proposals to take the restriction of the development of generative Artificial Intelligence in the country into its own hands.

The proposed measures, published (http://www.cac.gov.cn/2023-04/11/c_1682854275475410.htm) on Tuesday (April 11) by the Cyberspace Administration of

China (CAC) and titled *Administrative Measures for Generative Artificial Intelligence Services*, would apply to the research, development, and use of generative artificial intelligence products within China.

CAC says that tech firms will need to submit security assessments to the so-called "national network information department" before their AI services can be used by consumers.

The measures include AI-powered tech used to generate text, pictures, sounds, videos, codes, and other content "based on algorithms, models, and rules".

Under the rules, AI service providers in China will be required to ensure that users "scientifically understand and rationally use" the content generated by AI and "not to use the generated content to damage the image, reputation and other legitimate rights and interests of others, and to not engage in commercial hype or improper marketing".

Plus, the content generated by AI, according to CAC, "should reflect the core values of socialism, and must not contain subversion of state power, overthrow of the socialist system, incitement to split the country, undermine national unity, promote terrorism, extremism, and promote ethnic hatred and ethnic discrimination, violence, obscene and pornographic information, false information, and content that may disrupt economic and social order".

Adds CAC: "If users find that the generated content does not meet the requirements of these measures, they have the right to report to the cyberspace administration or relevant competent authorities".

The arrival of the draft proposals to bring tighter controls around the development and public use of generative AI tools in China arrives as the market's tech giants demonstrate their own AI models to rival the likes of Open AI's Chat GPT.

On Tuesday, Alibaba Group (<http://www.musicbusinessworldwide.com/companies/alibaba/>) unveiled (<http://www.reuters.com/technology/alibaba-unveils-tongyi-qianwen-an-ai-model-similar-gpt-2023-04-11/>) its AI language model called Tongyi Qianwen which, in English, means "truth from a thousand questions".

Baidu launched (http://www.theregister.com/2023/03/21/chinese_chatgpt_analogue_maker_to/) its own, reportedly underwhelming version (<http://www.theguardian.com/world/2023/mar/16/chinese-chatgpt-rival-search-engine-baidu-fails-inpress-ernie-bot>) of Chat GPT, called ERNIE, last month.

FIG. 14B
(PRIOR ART)

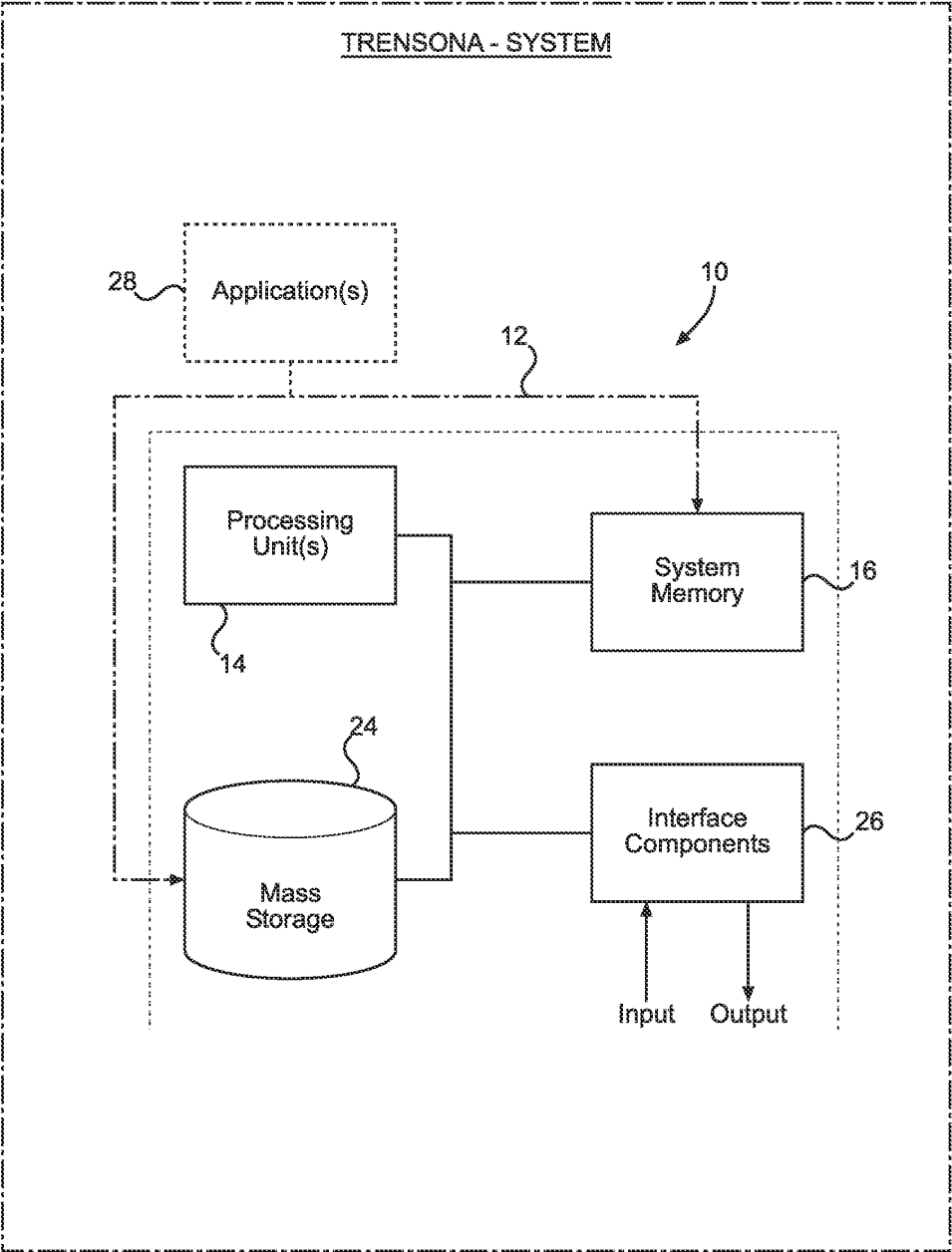


FIG. 15
(PRIOR ART)

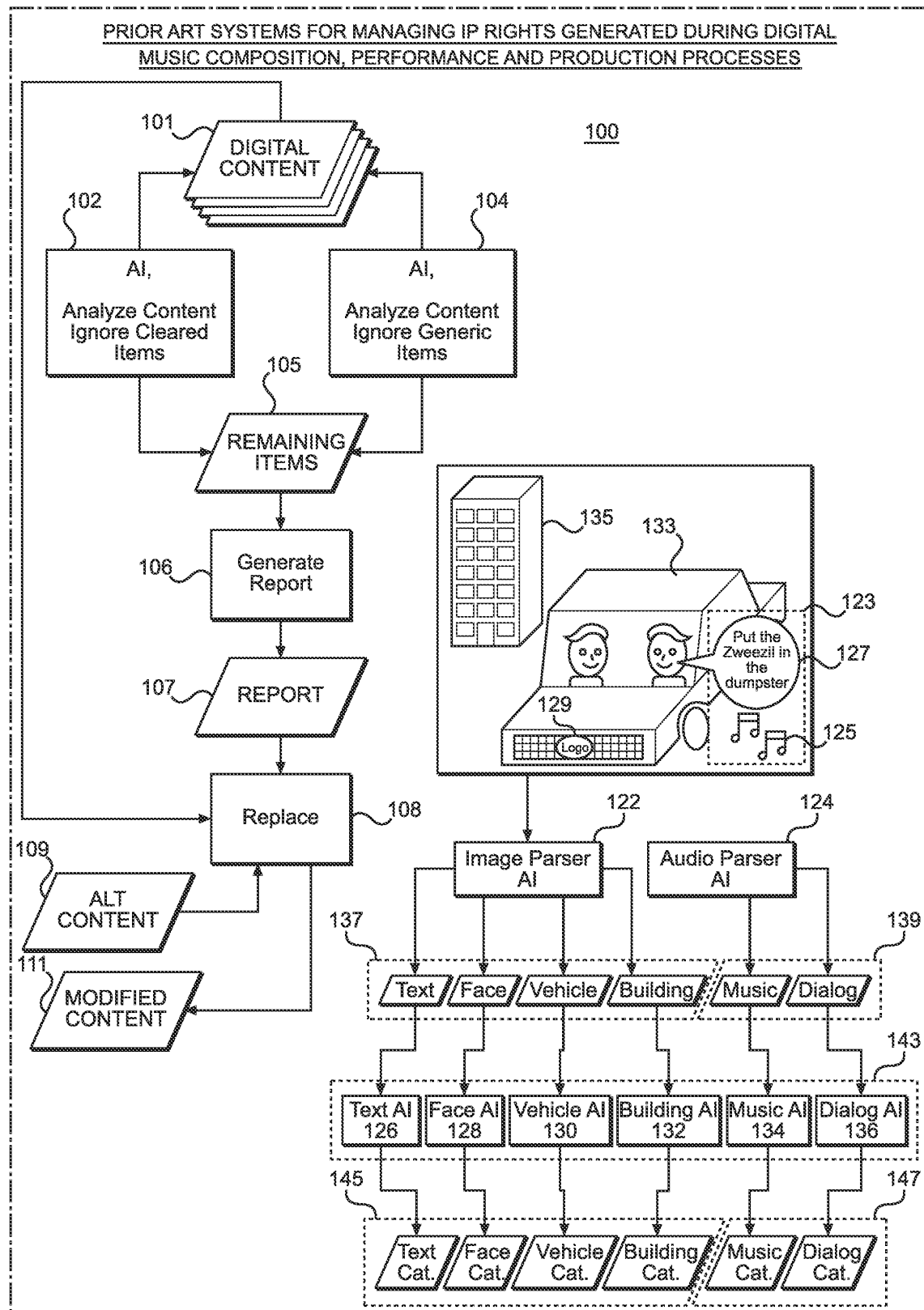


FIG. 16
(PRIOR ART)

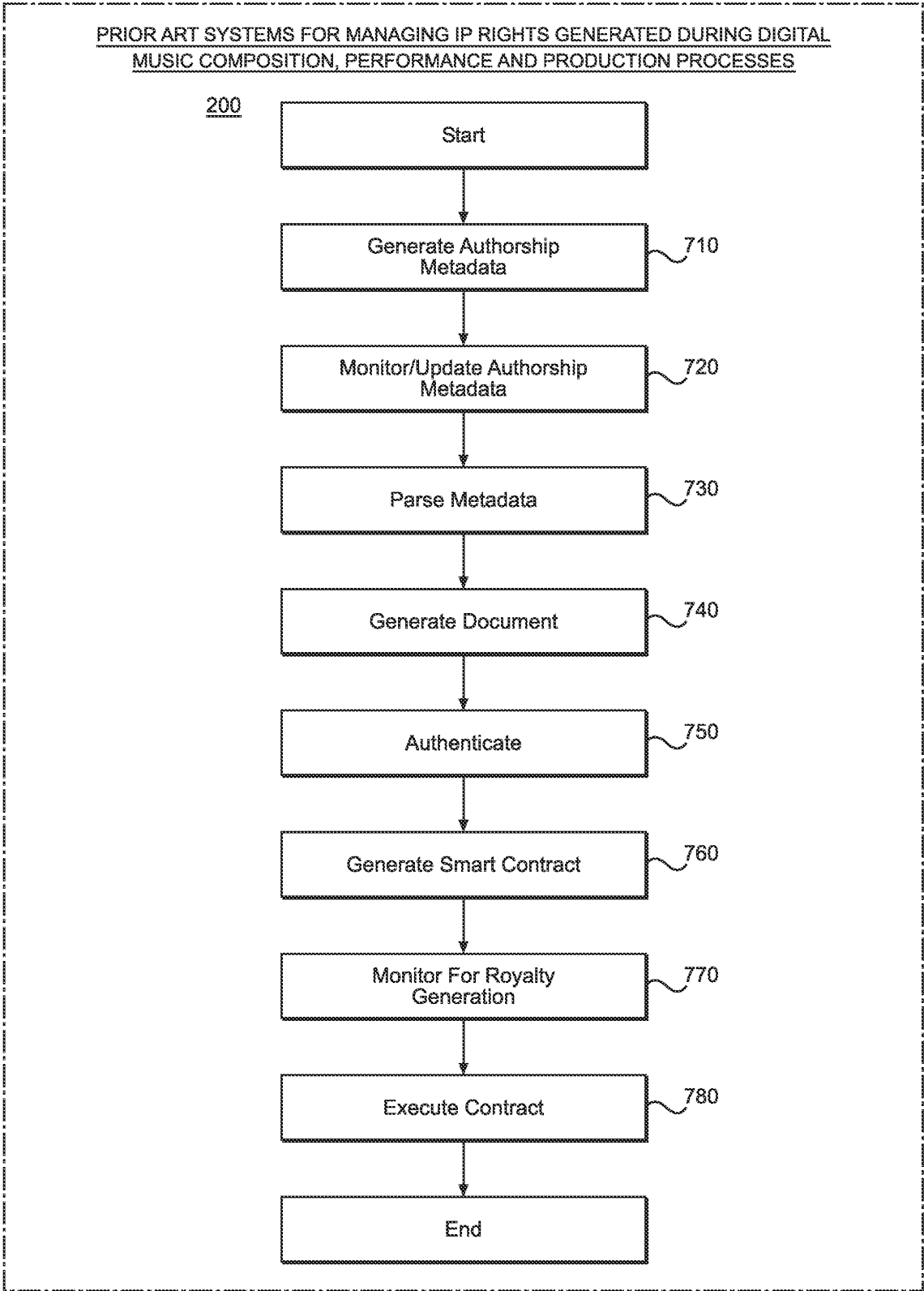


FIG. 17A
(PRIOR ART)

PRIOR ART SYSTEMS FOR MANAGING IP RIGHTS GENERATED DURING DIGITAL
MUSIC COMPOSITION, PERFORMANCE AND PRODUCTION PROCESSES

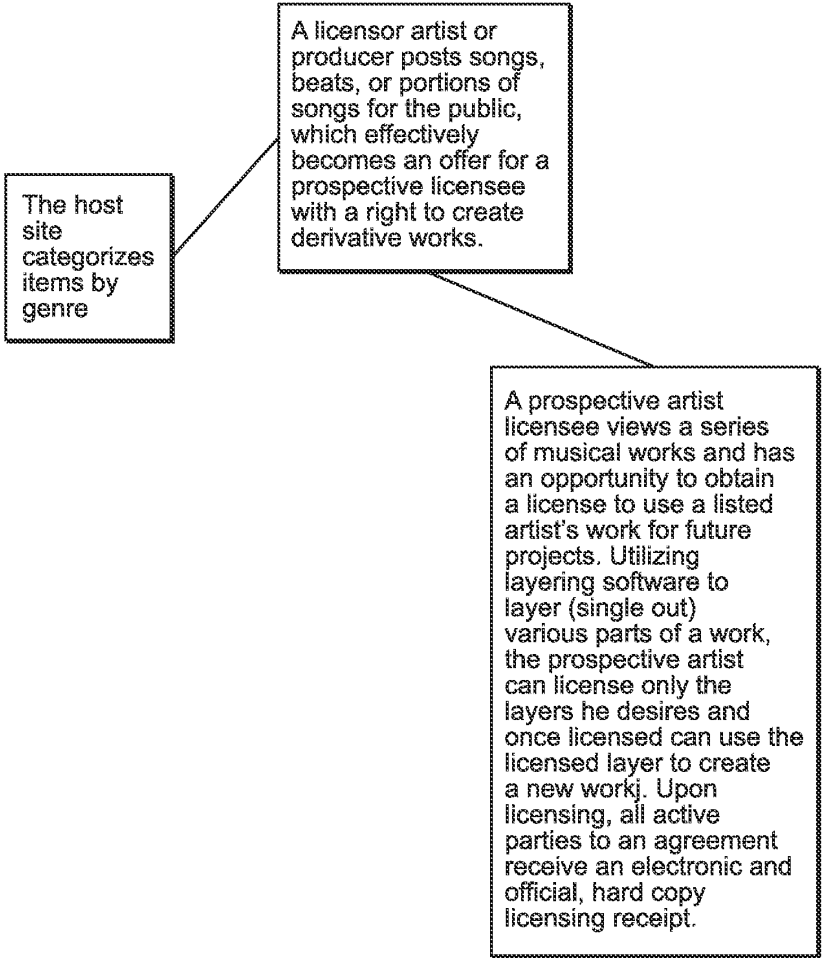


FIG. 17B
(PRIOR ART)

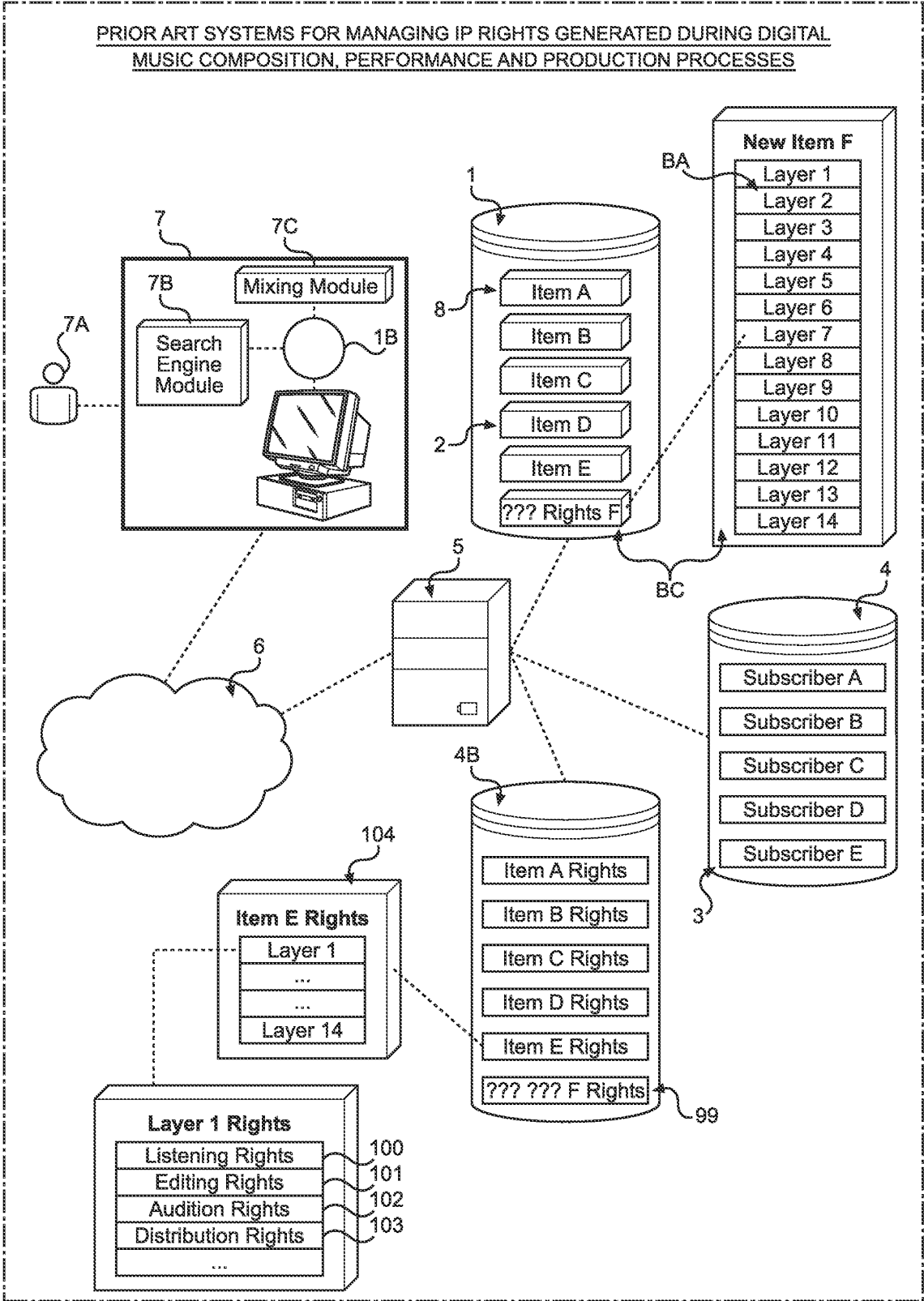


FIG. 17C
(PRIOR ART)

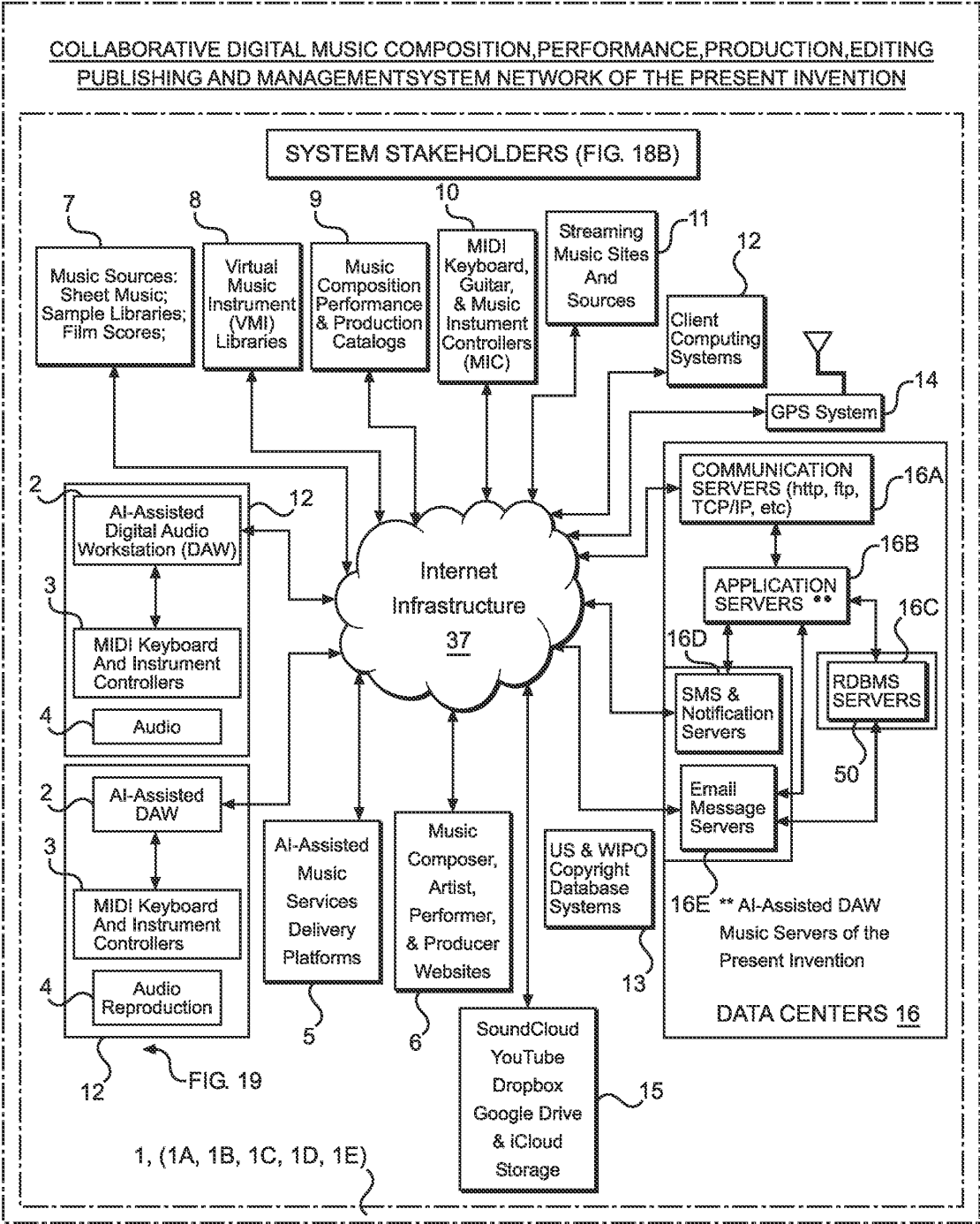


FIG. 18A

**Stakeholders on the Global Music System Network
Of The Present Invention**

Author/Creators: Composers, Performers, Producers,
Editors, DAW Recorders, Sound Mixers, Sound
Engineers, Mastering Engineers, Technicians, Video
Editors, Scoring Editors, etc.

Copyright Registration Offices: US, CRO, WIPO, etc.

Music Publishers (e.g. Licensees) and Copyright Owners:
including Sheet Music Publishers, Record Labels,
Streaming Services, Digital Downloading, etc.

Performance Rights Organizations (PRO), e.g.
ASCAP, SEGAM, etc.

Music Distribution Platforms: Songtrader, etc.

Music Steaming Services: Apple[®], Spotify[®], Pandora[®],

Music Creation and Publishing Platforms:
(BandLab[®], Splice[®], TicTock[®] (ByteDance[®]), etc.)

Government Agencies & Courts of Law:

Copyright Attorneys and Law Firms:

FIG. 18B

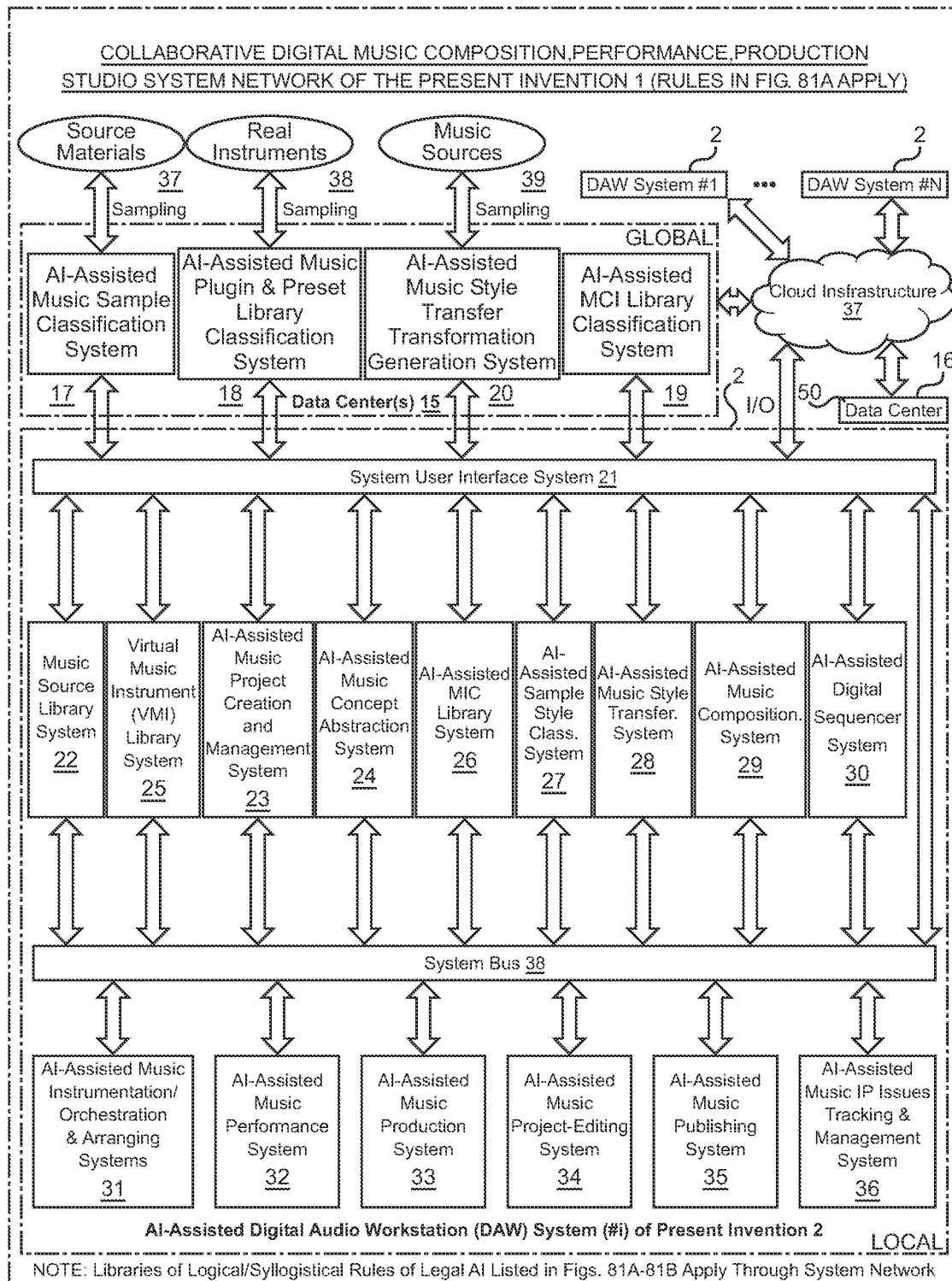
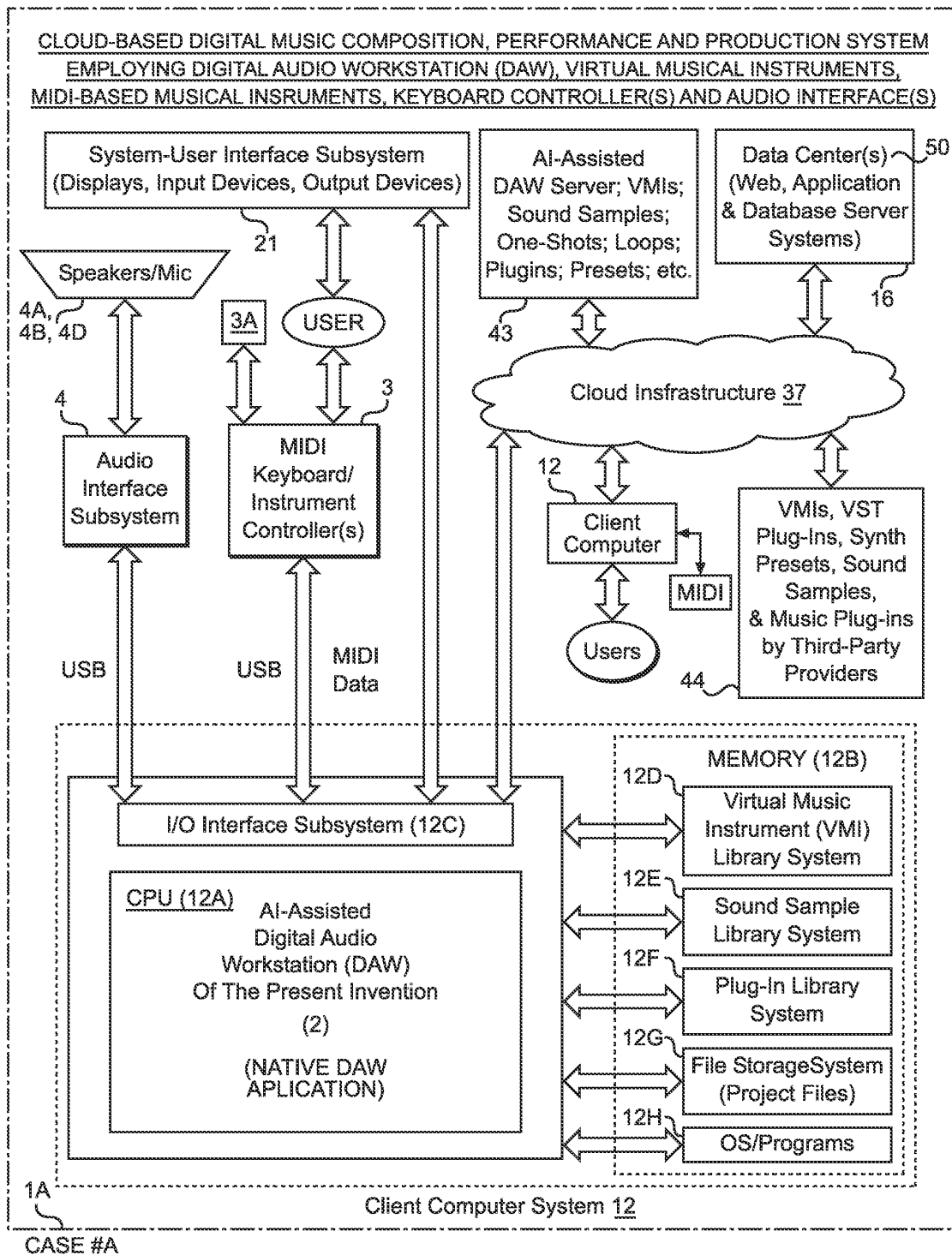


FIG. 19

**FIG. 19A**

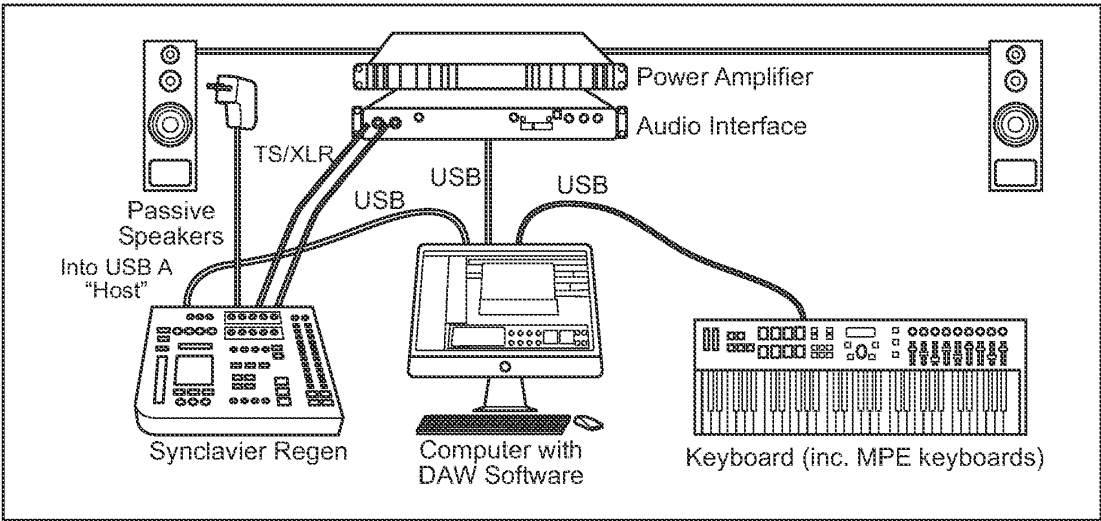


FIG. 19A1 DAW System In iMac

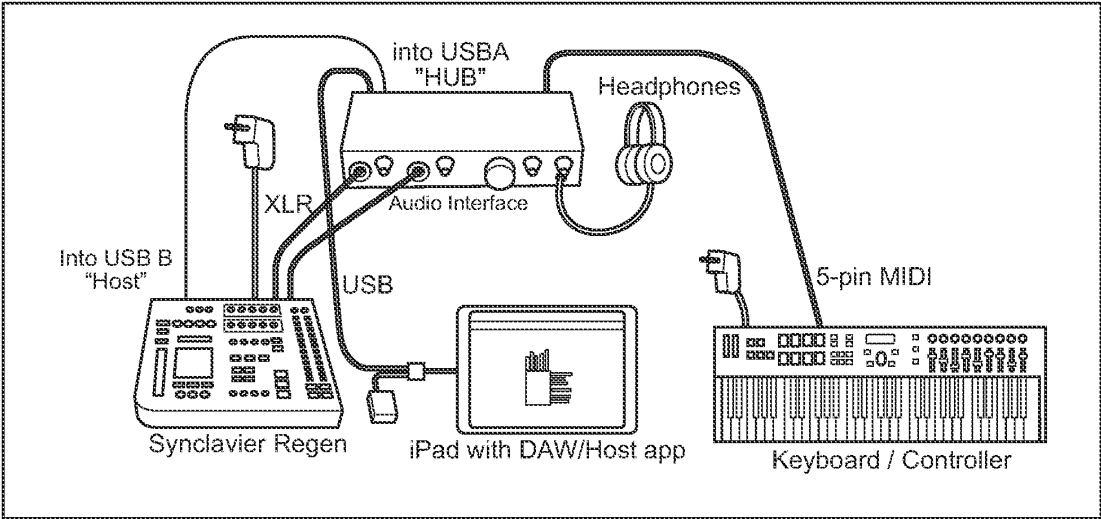


FIG. 19A2 DAW System In iPad

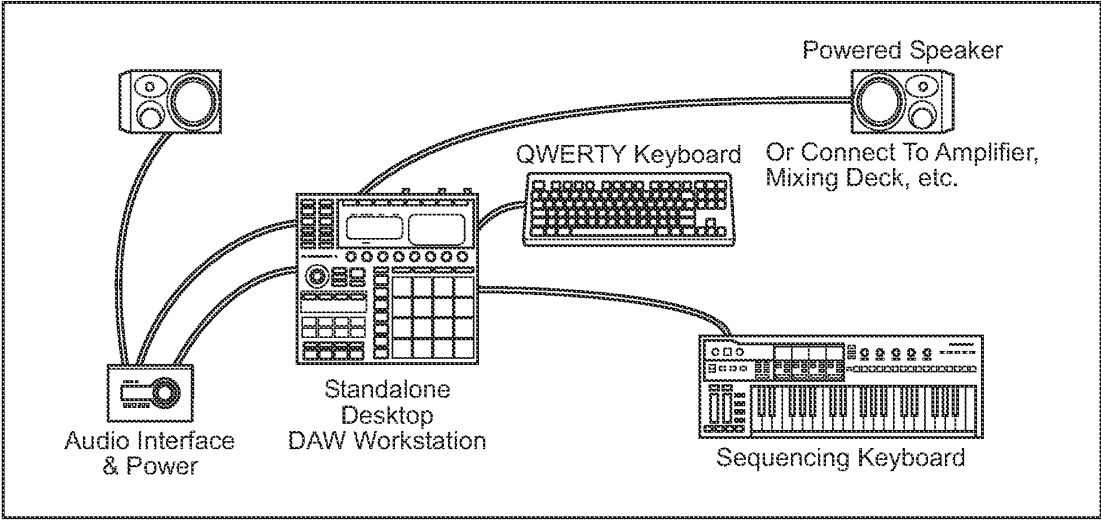


FIG. 19A3

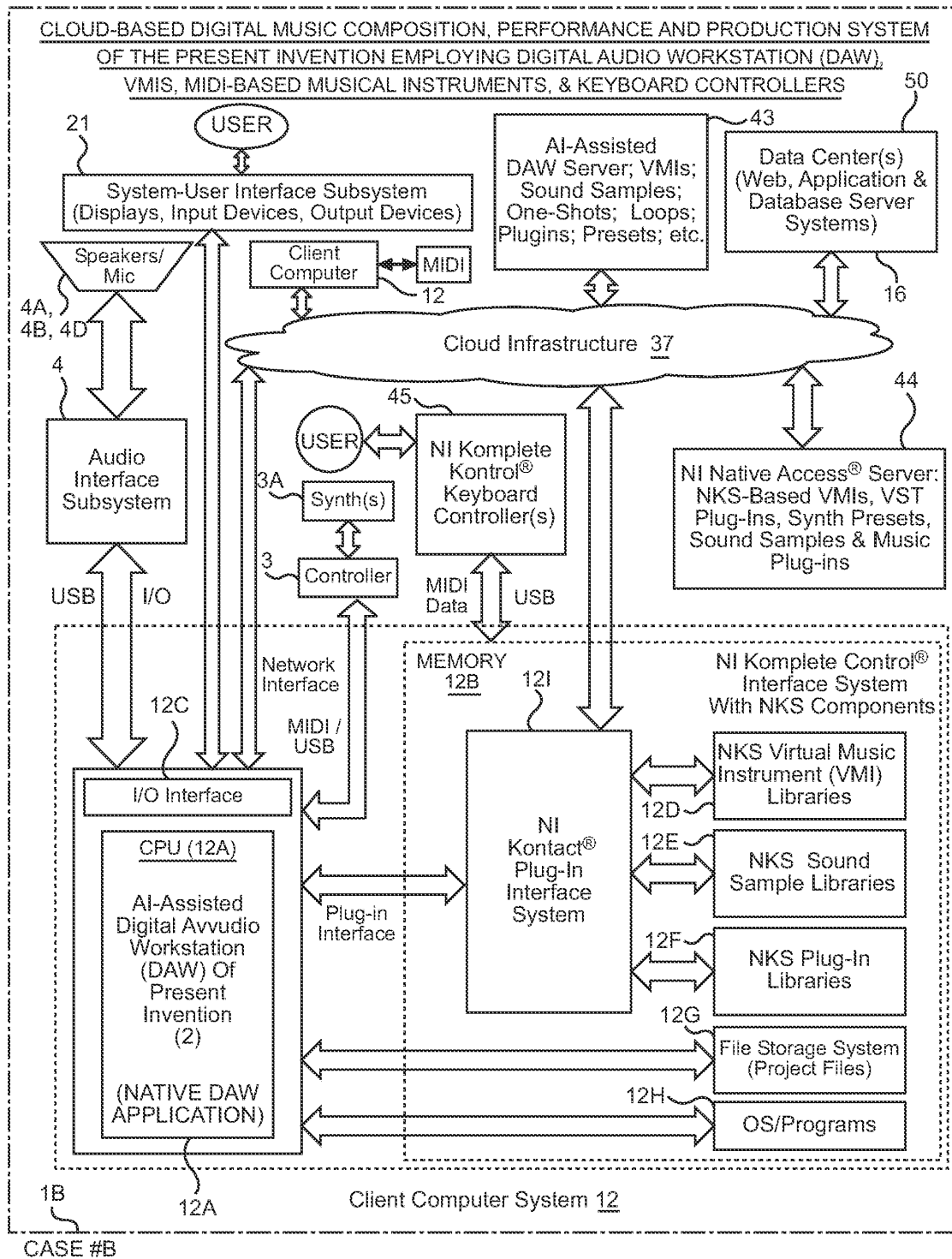
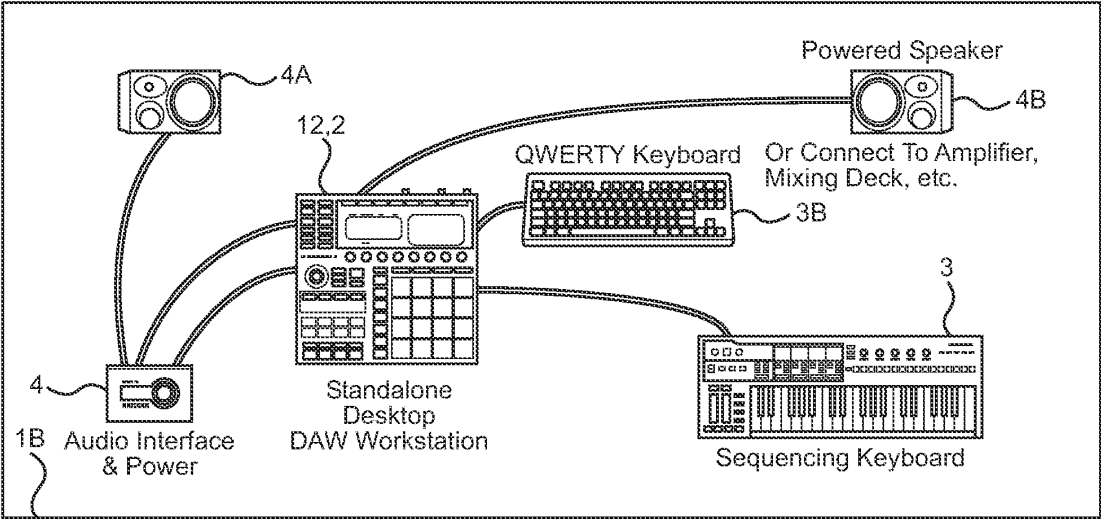
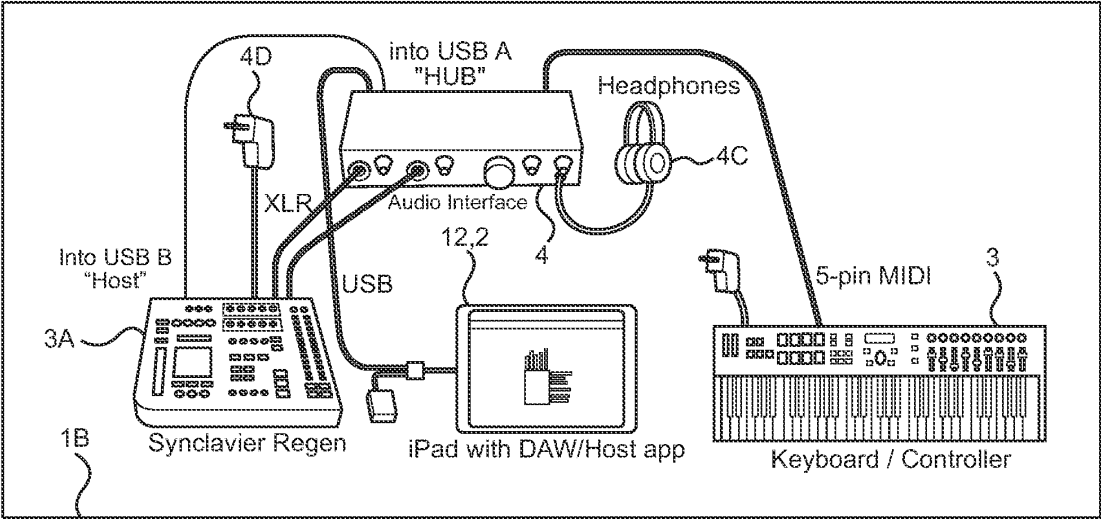
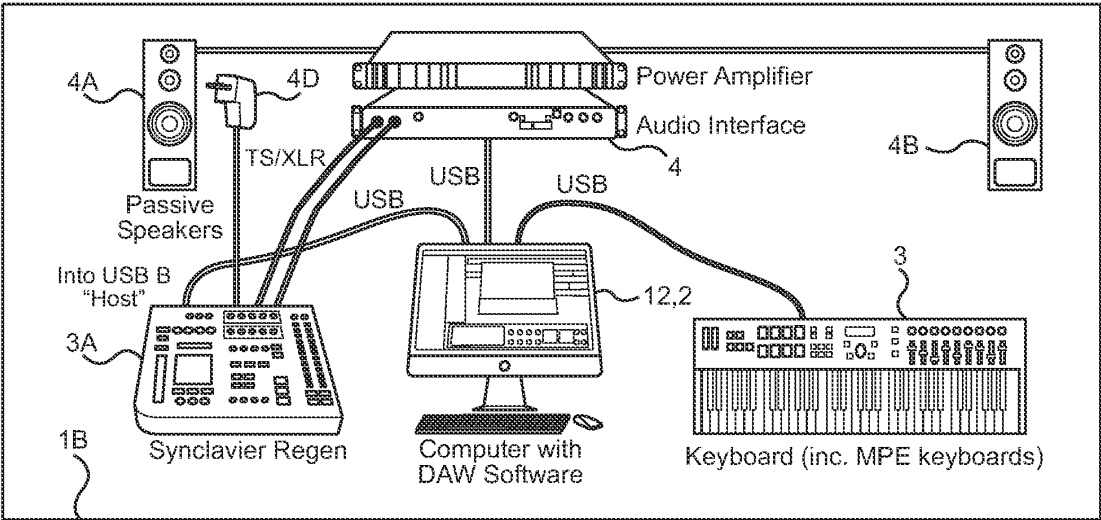


FIG. 19B



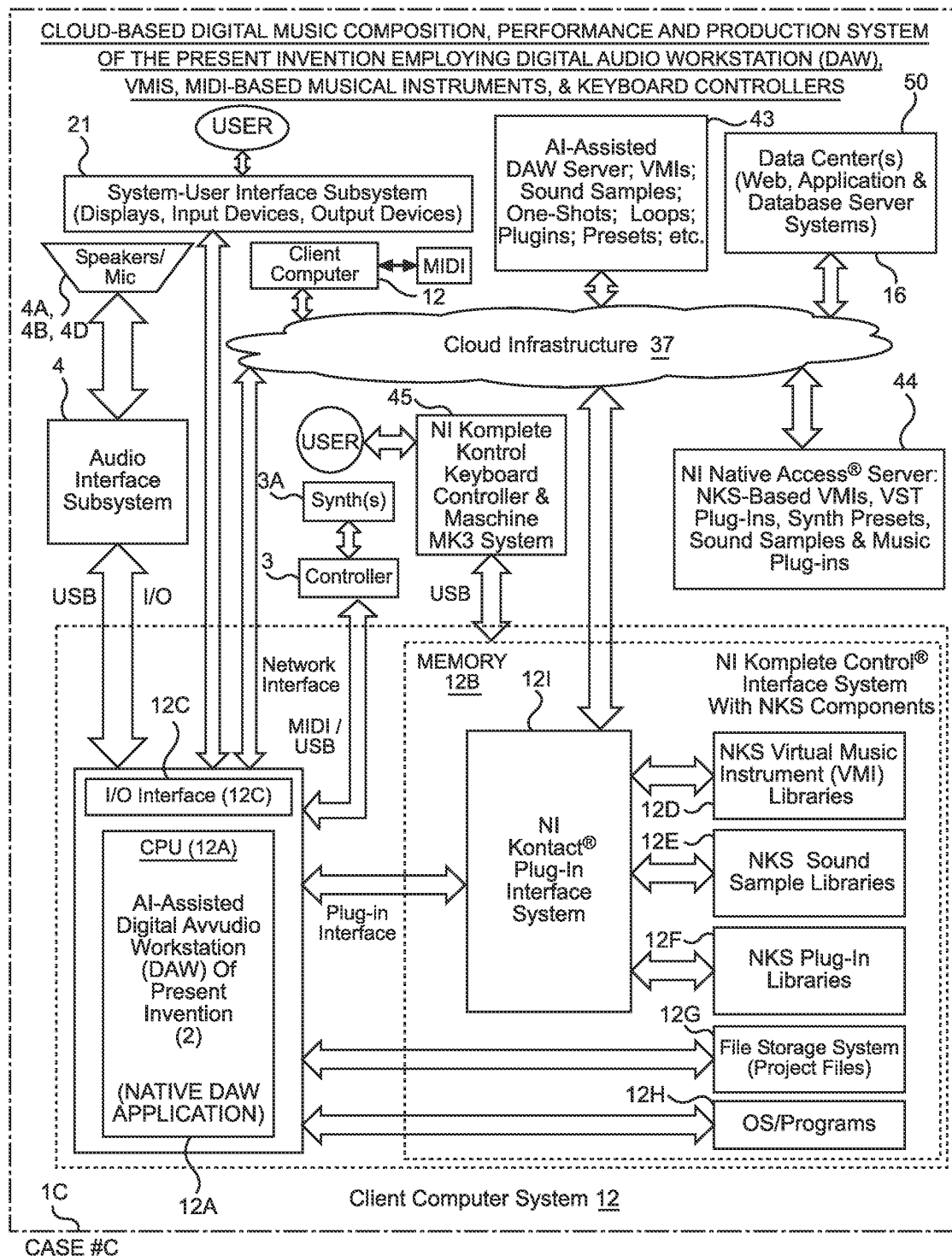
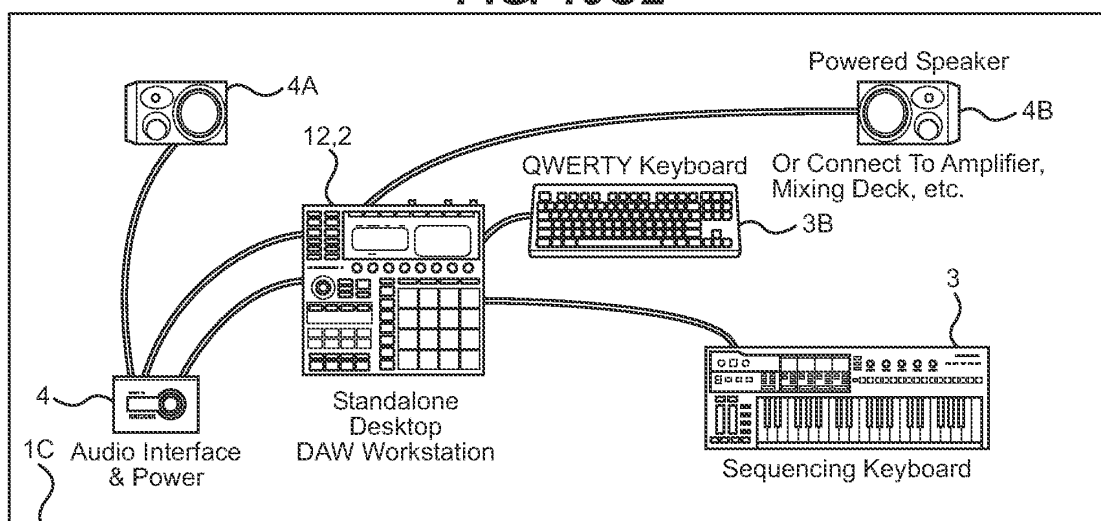
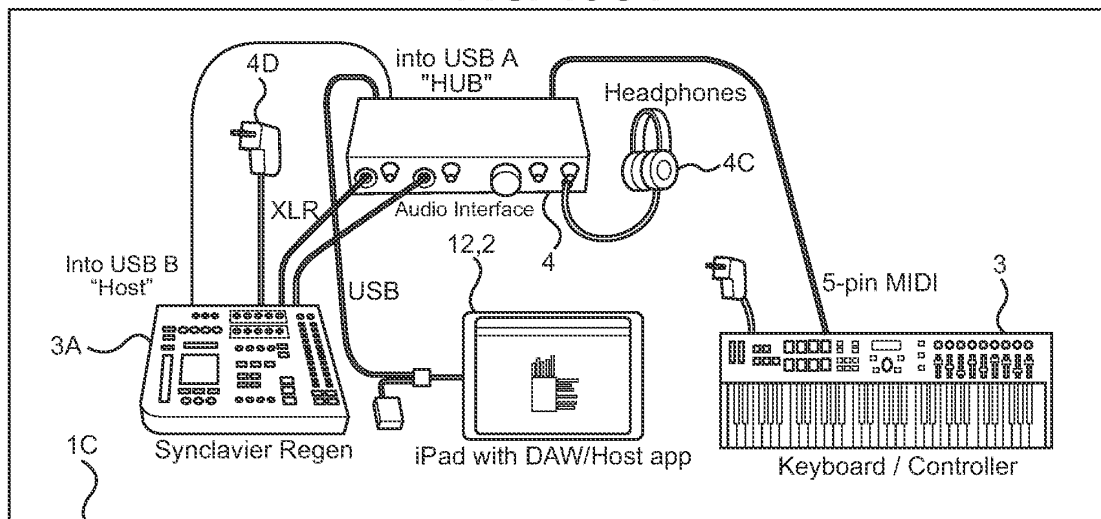
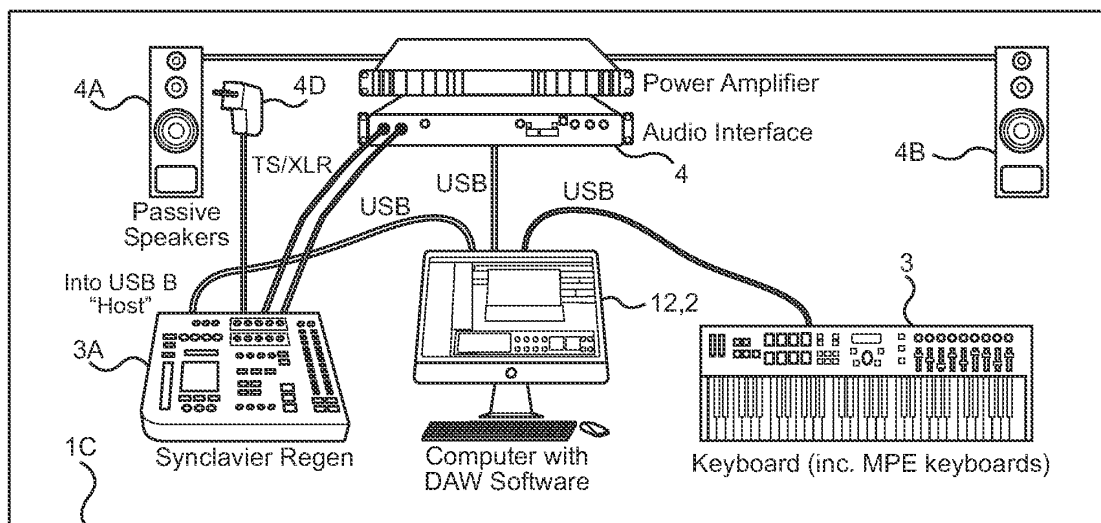
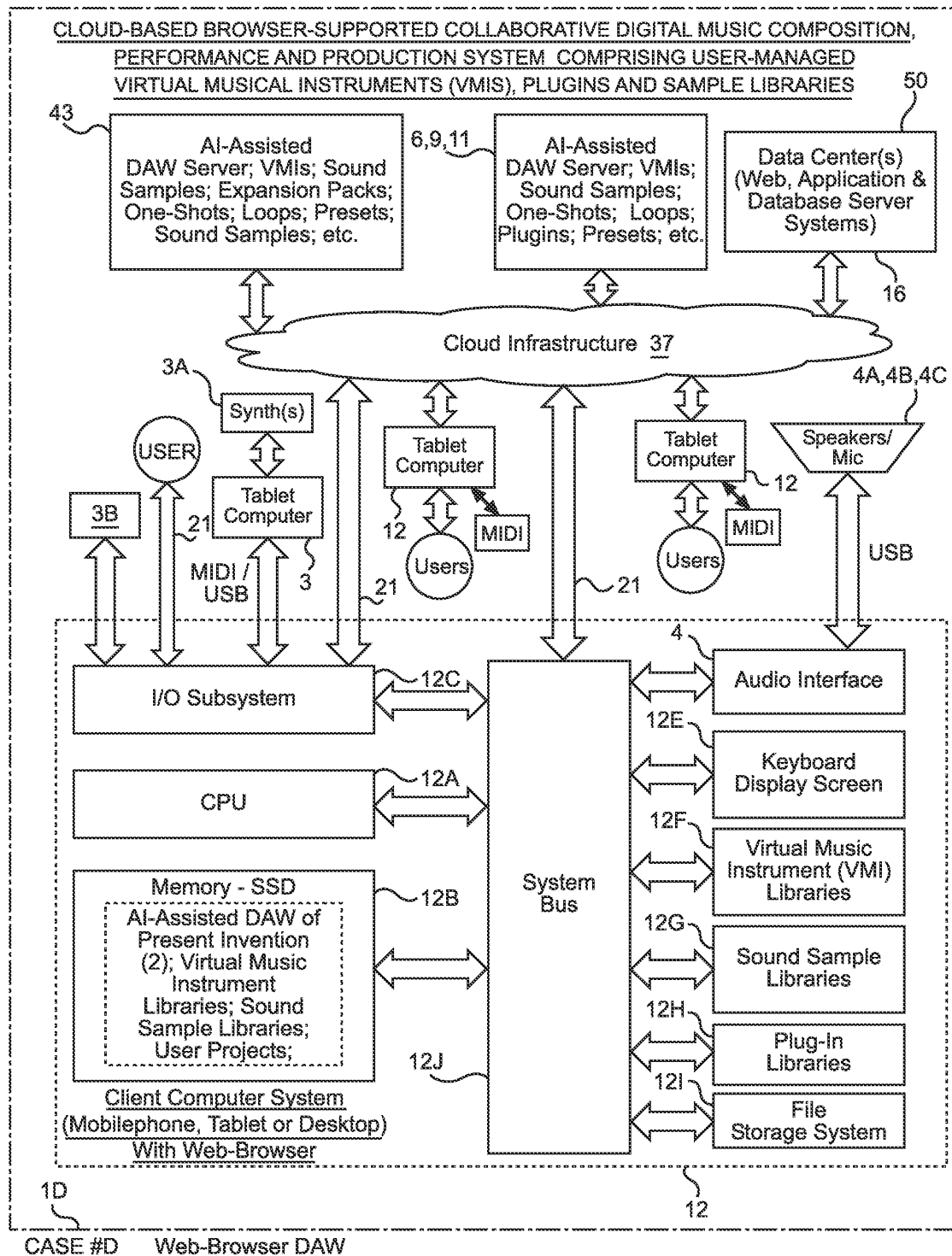
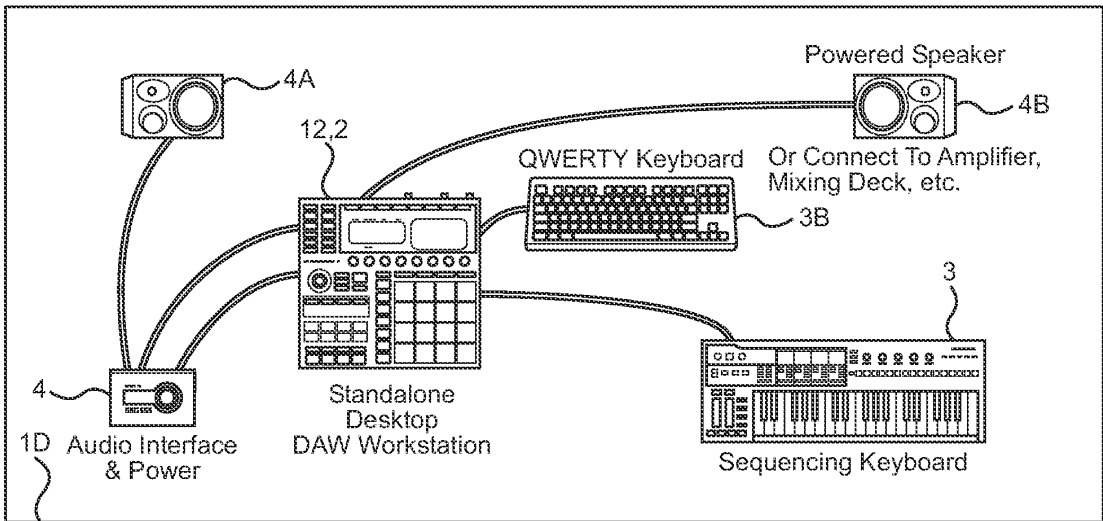
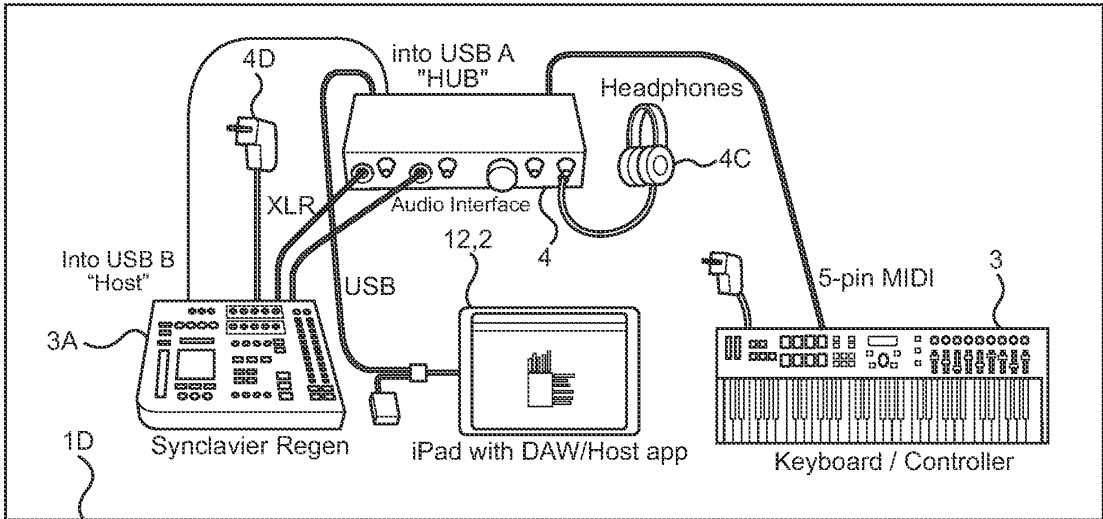
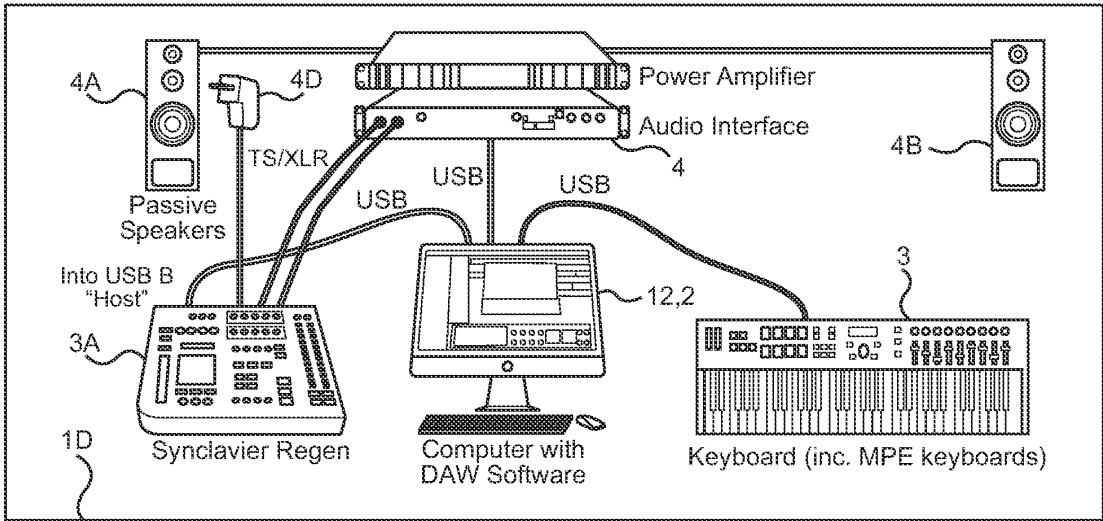
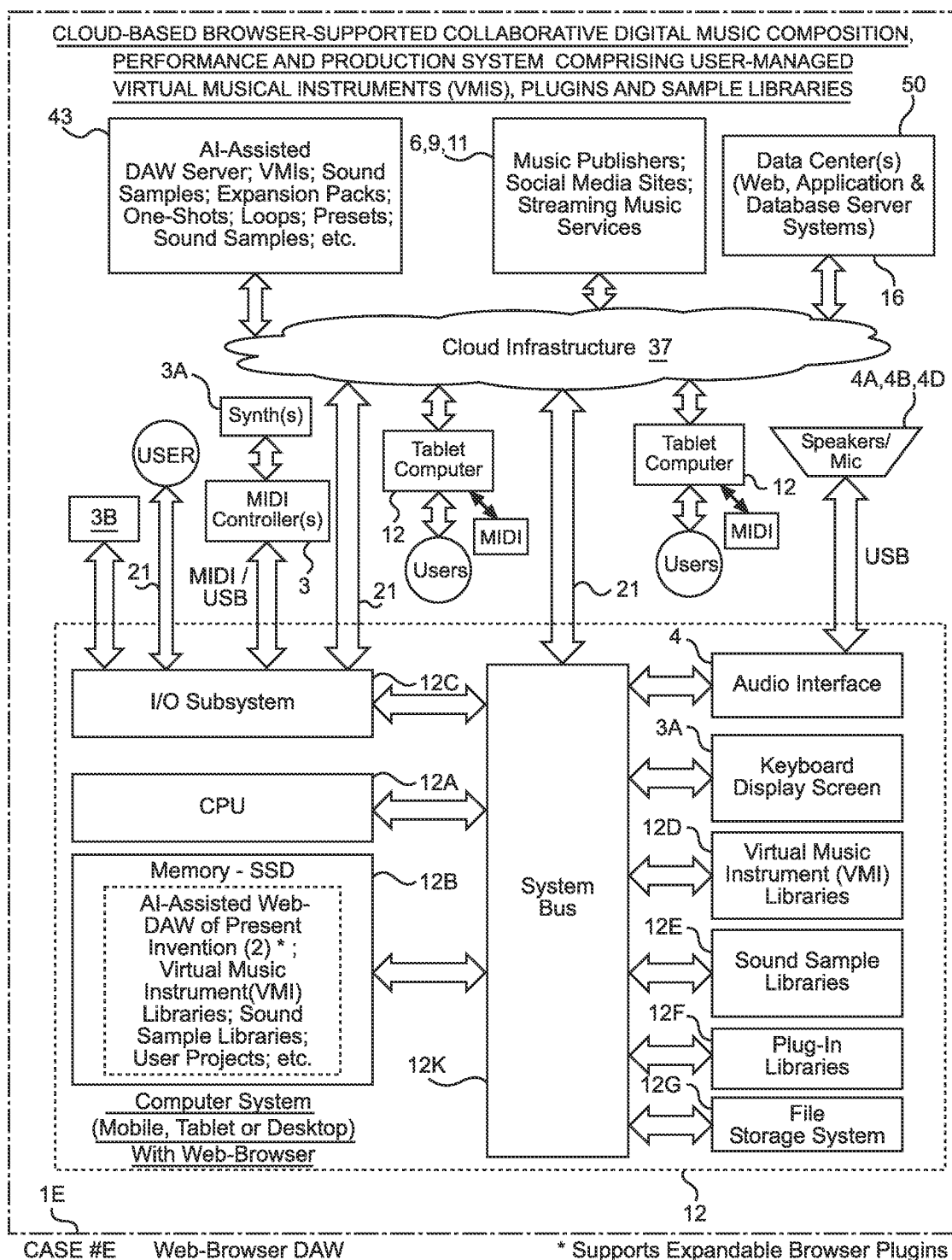


FIG. 19C









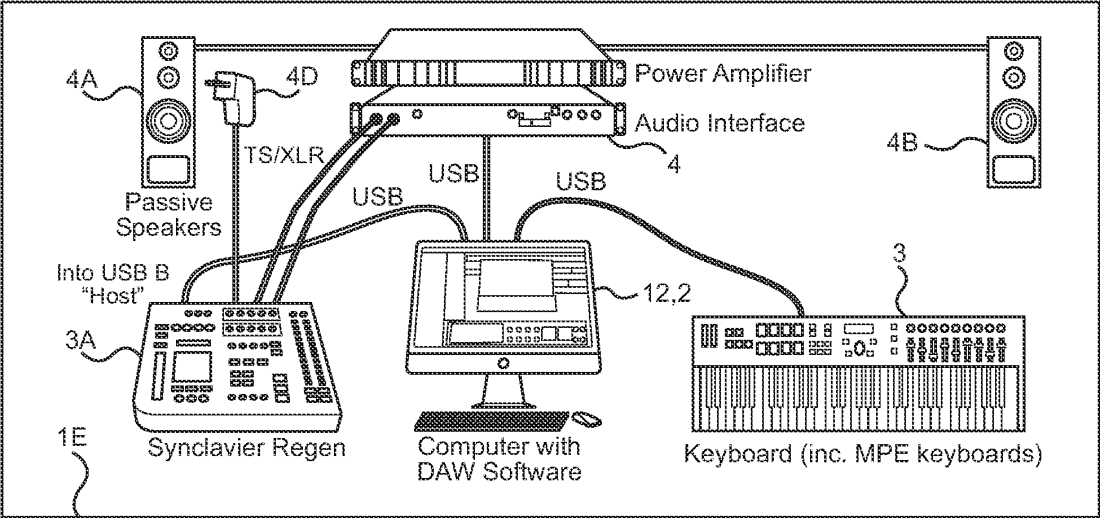


FIG. 19E1 DAW System In iMac

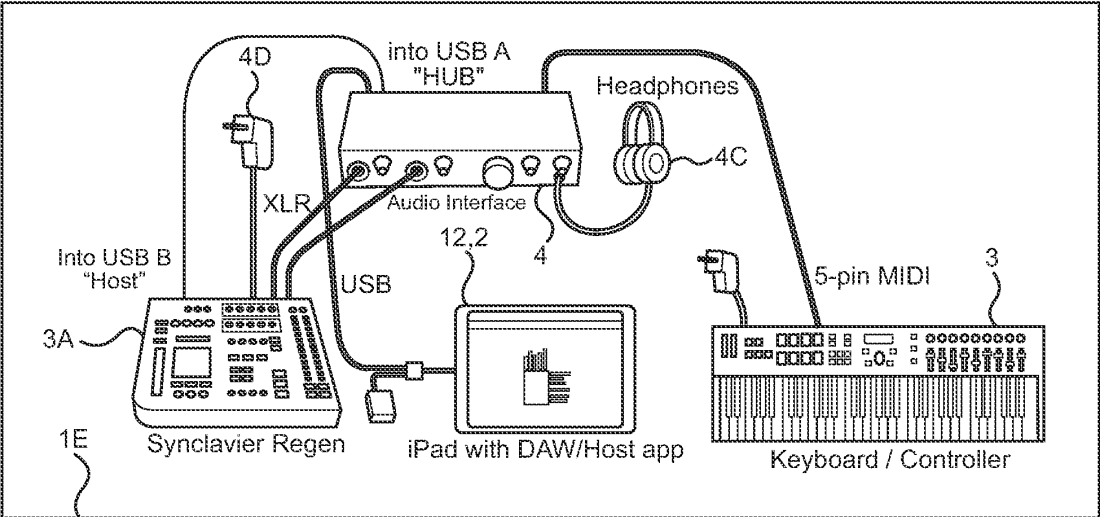


FIG. 19E2 DAW System In iPad

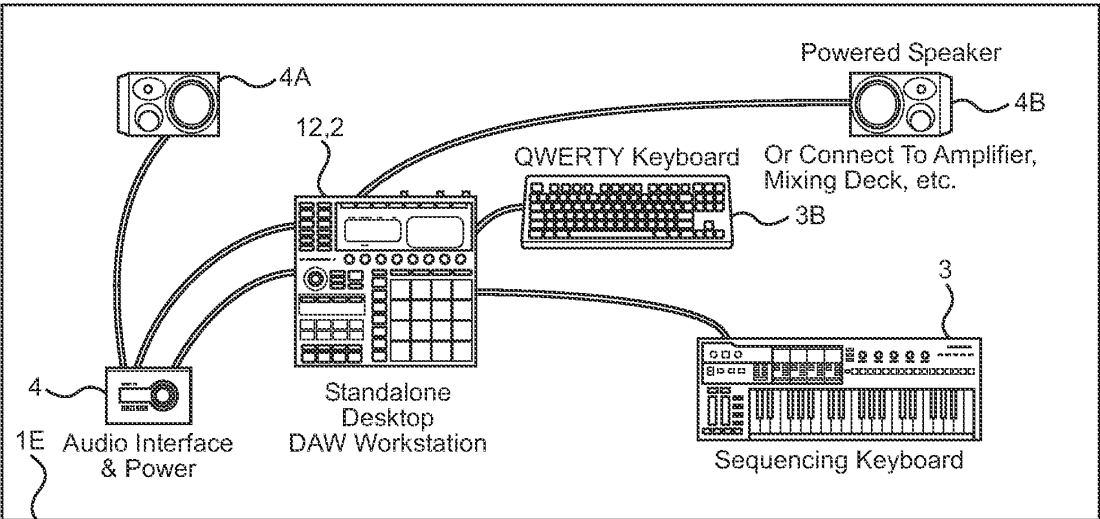


FIG. 19E3

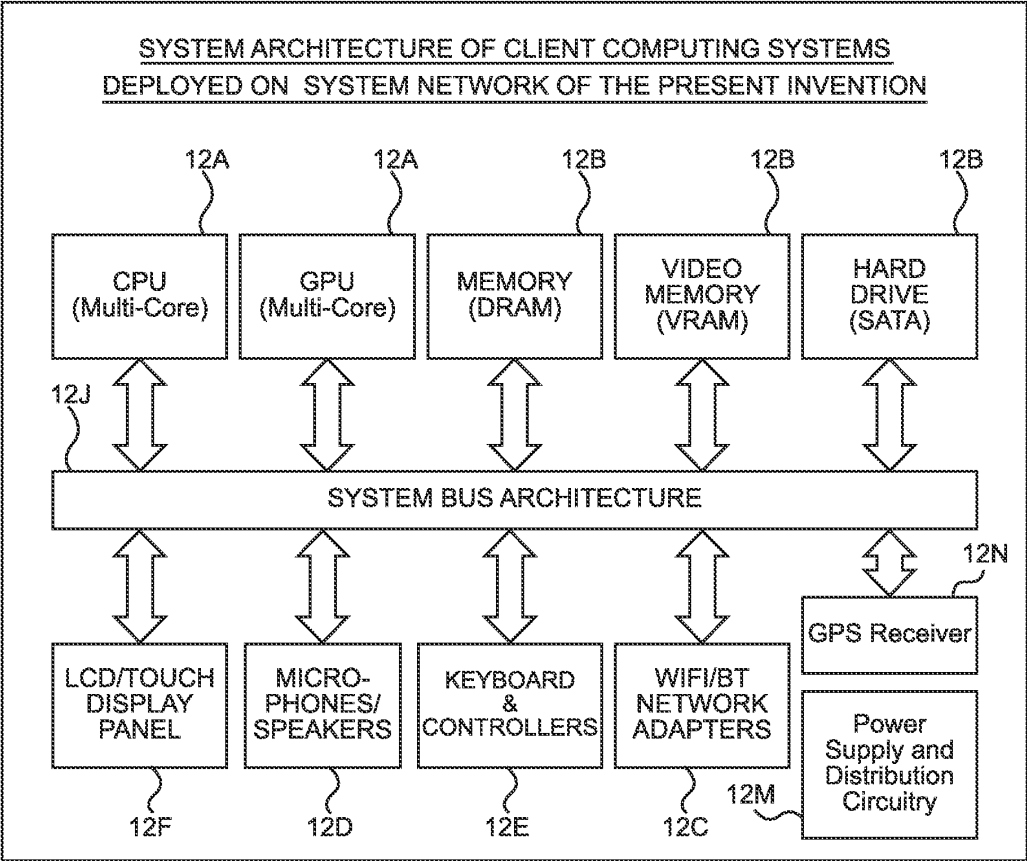


FIG. 20A1

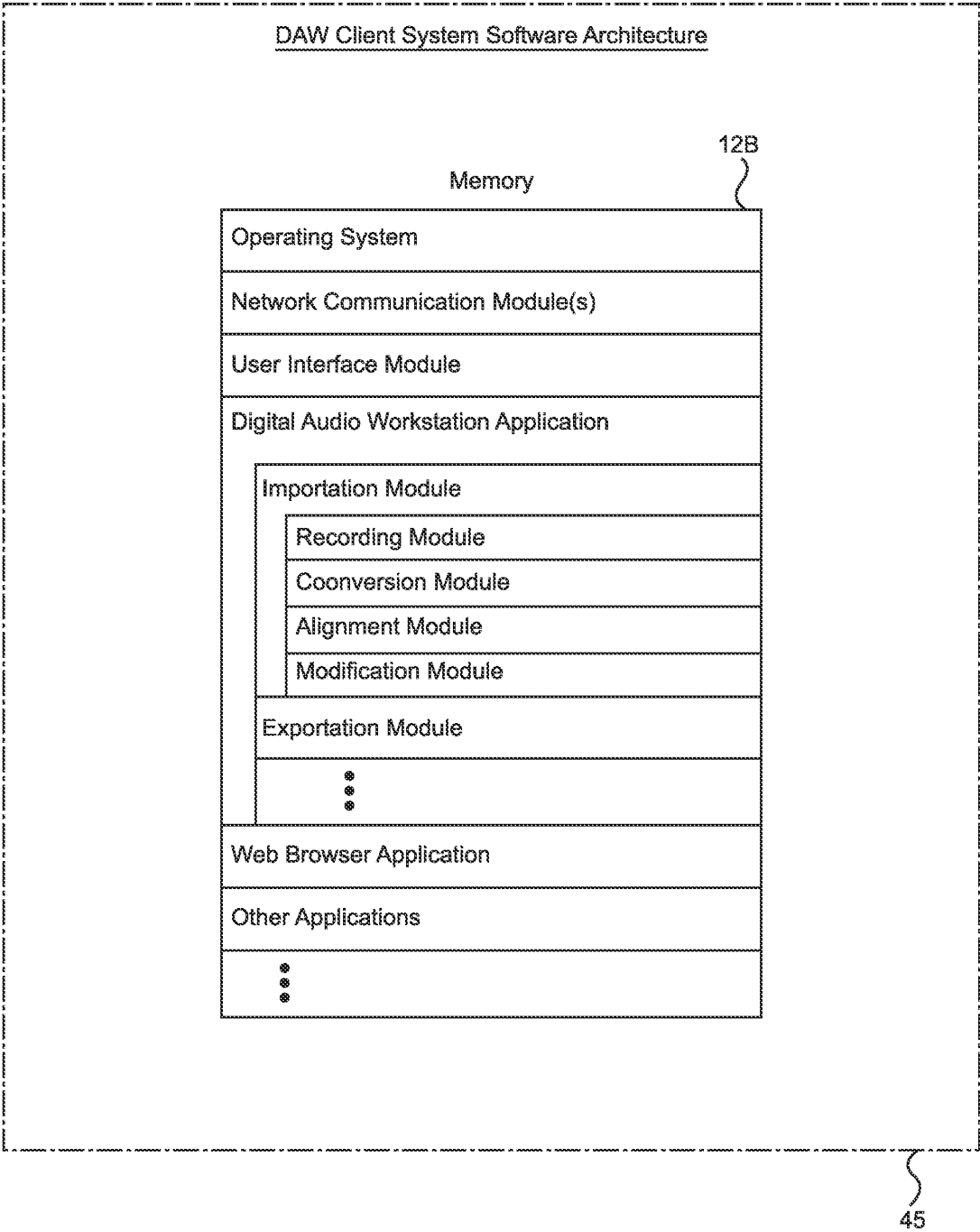


FIG. 20A2

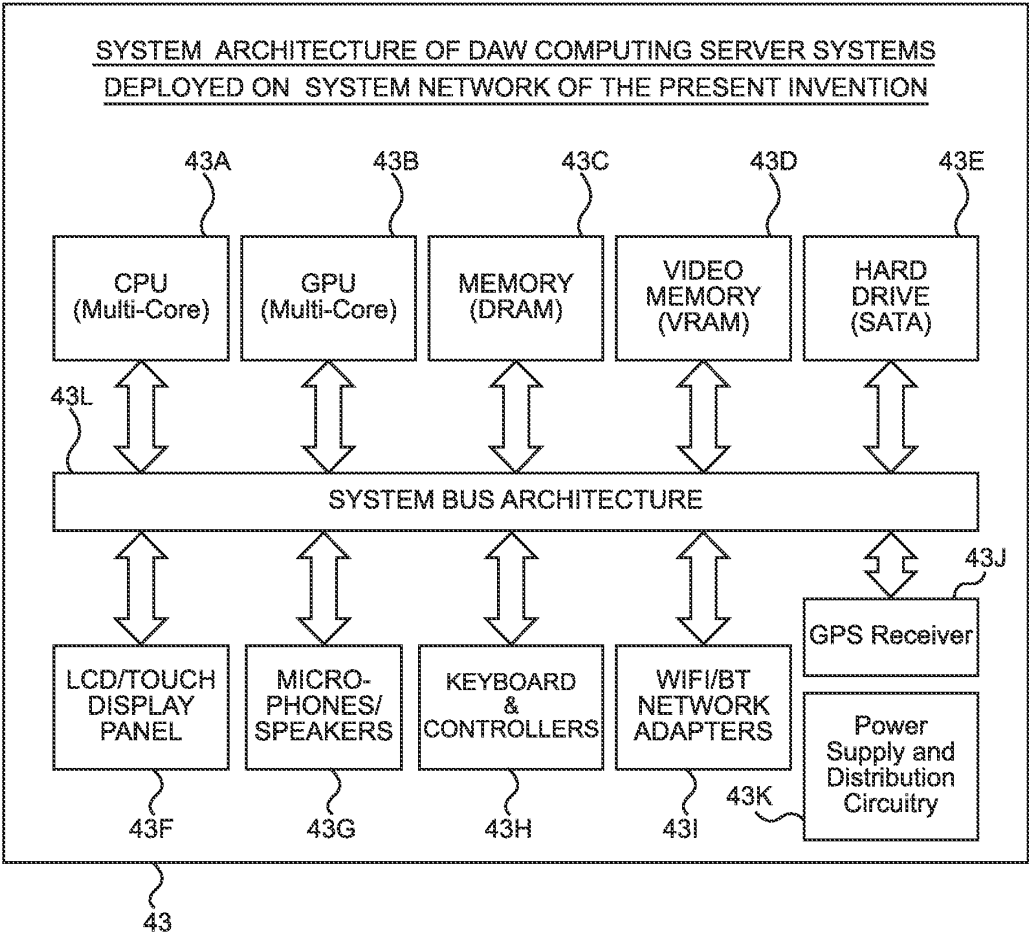


FIG. 20B1

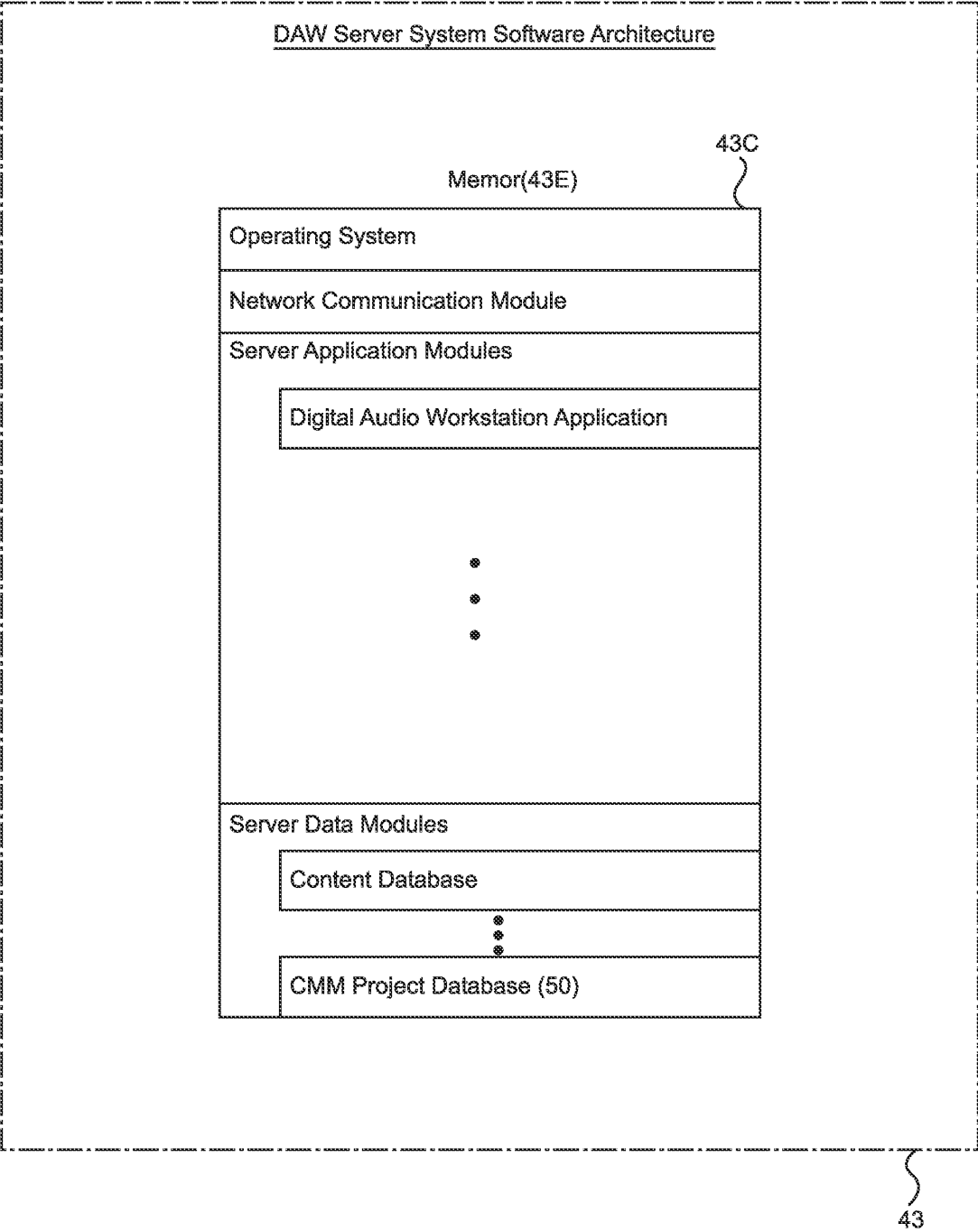


FIG. 20B2

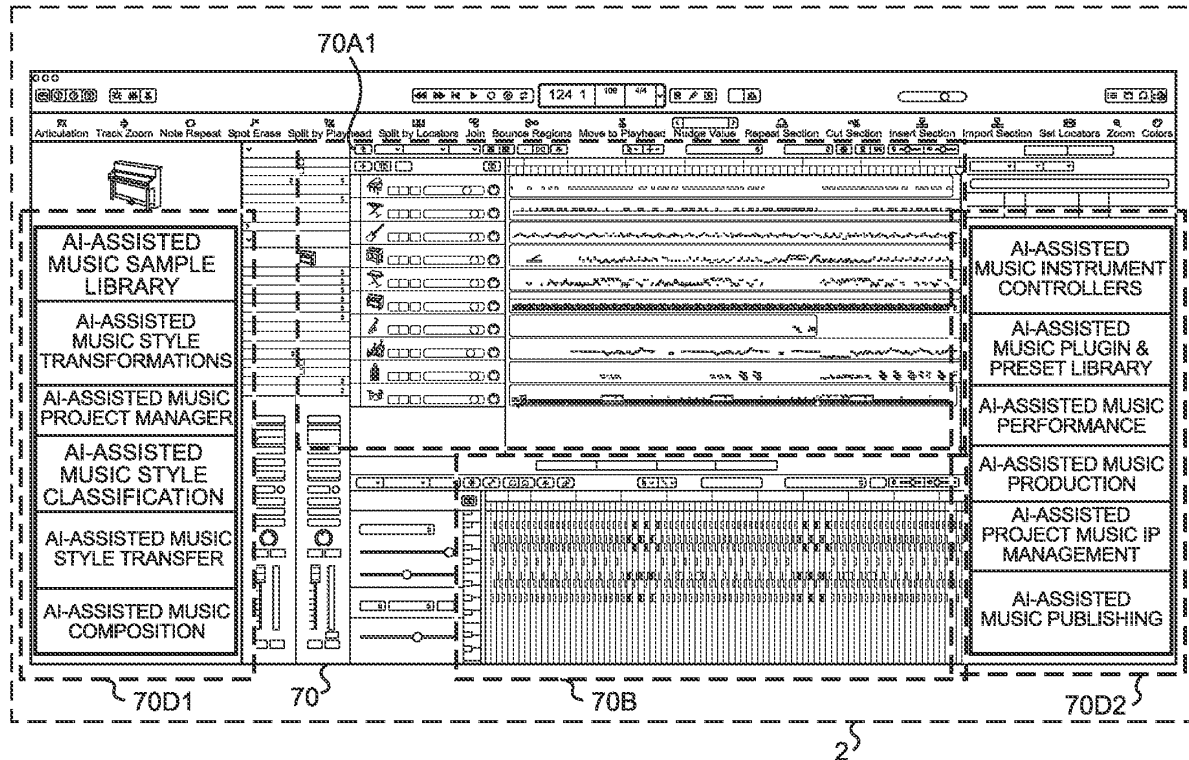


FIG. 21A

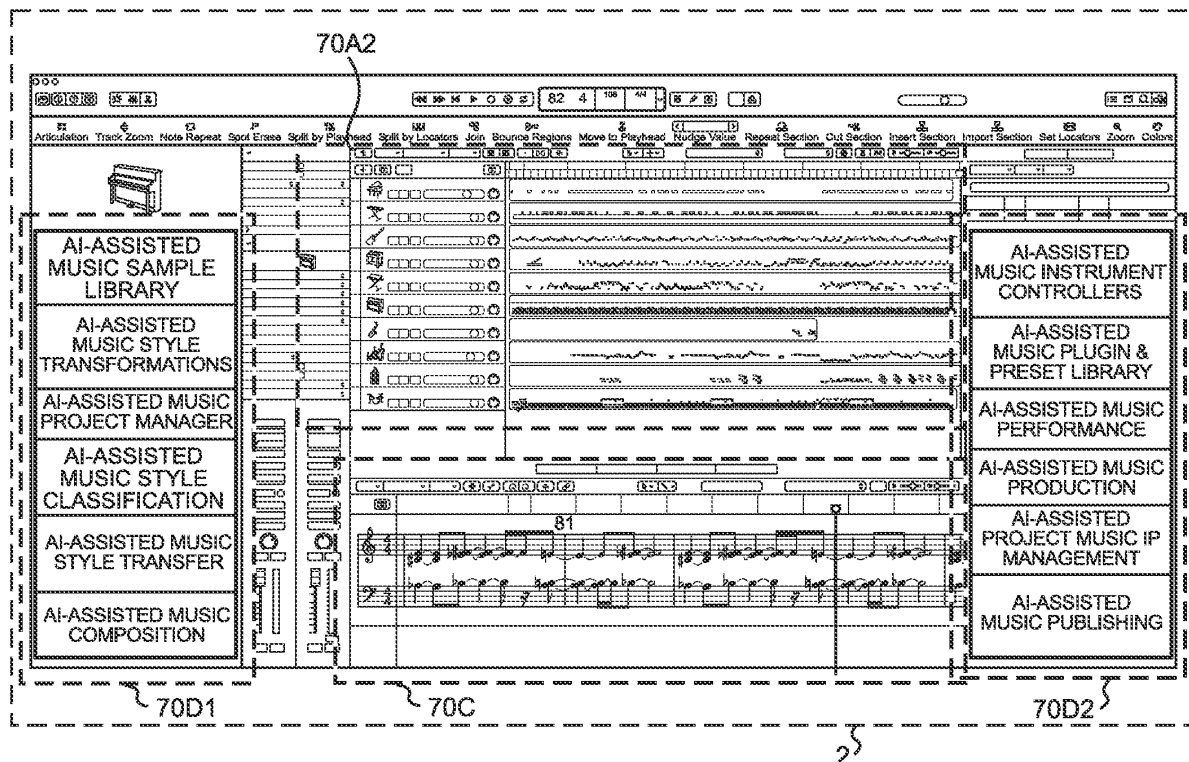


FIG. 21B

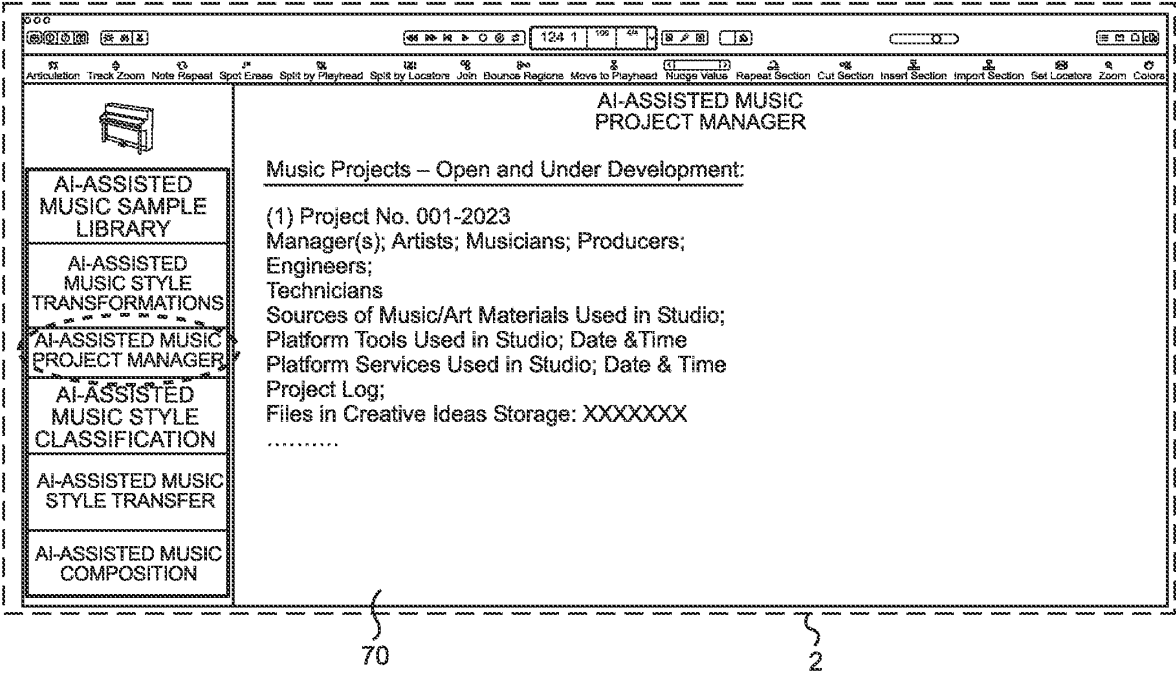
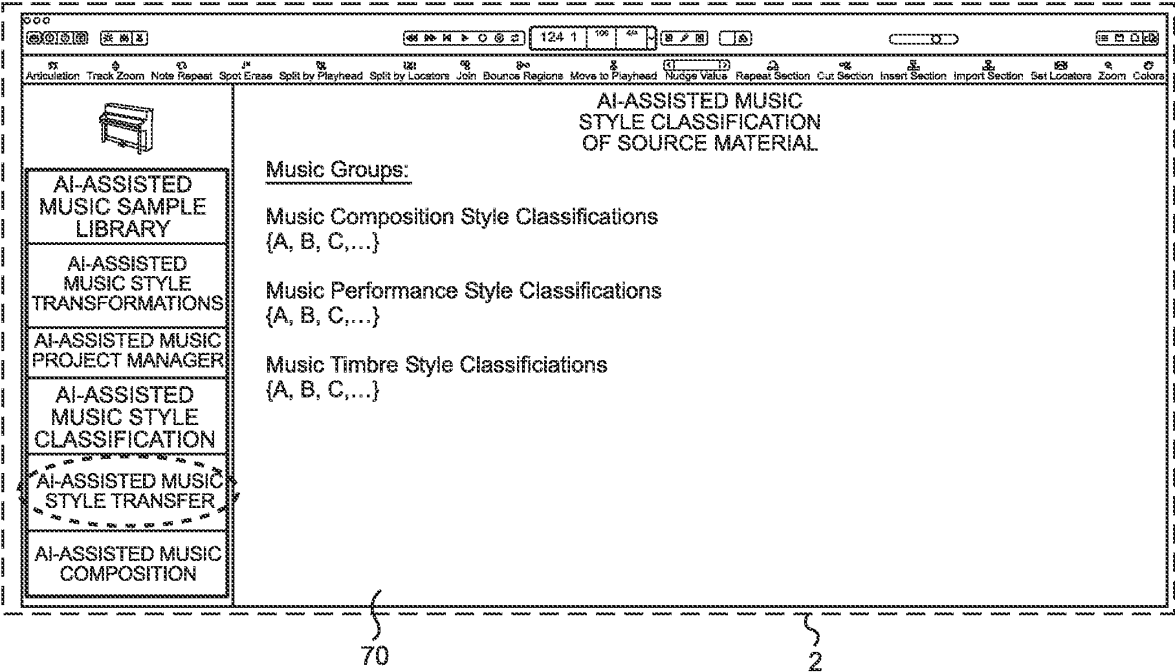
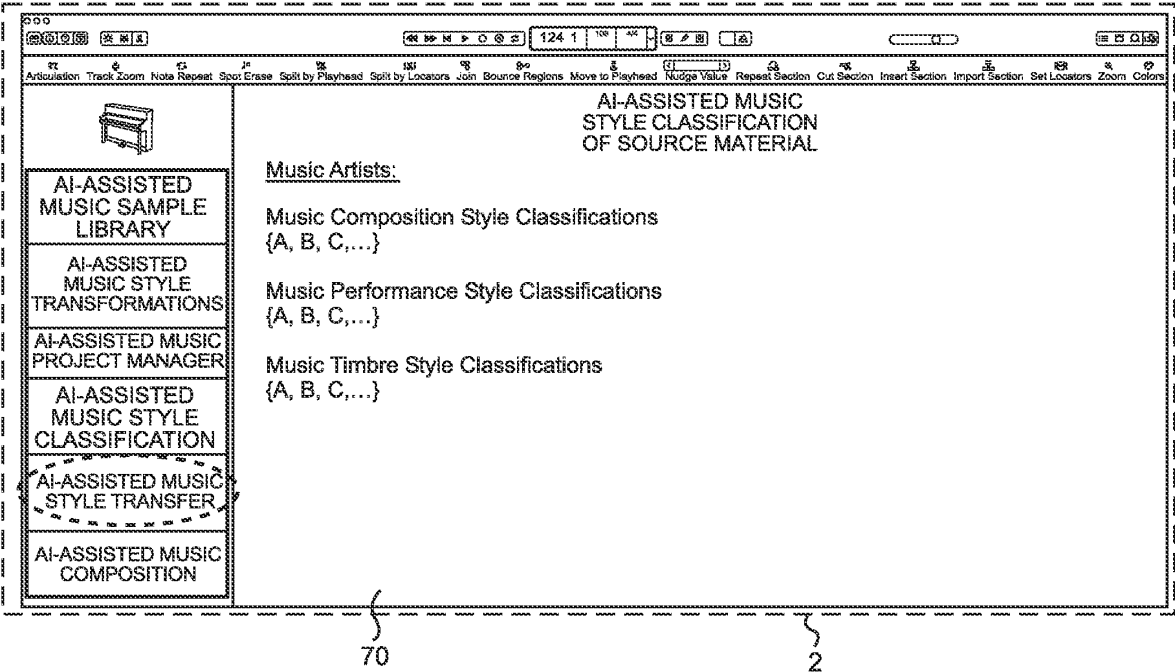
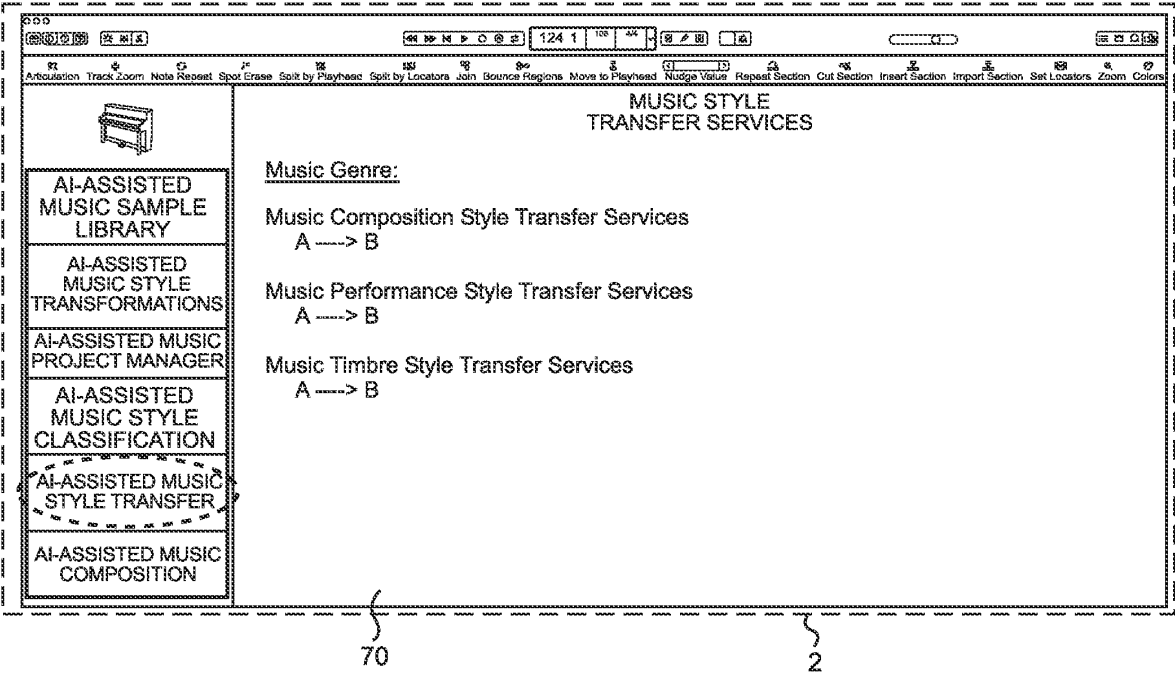
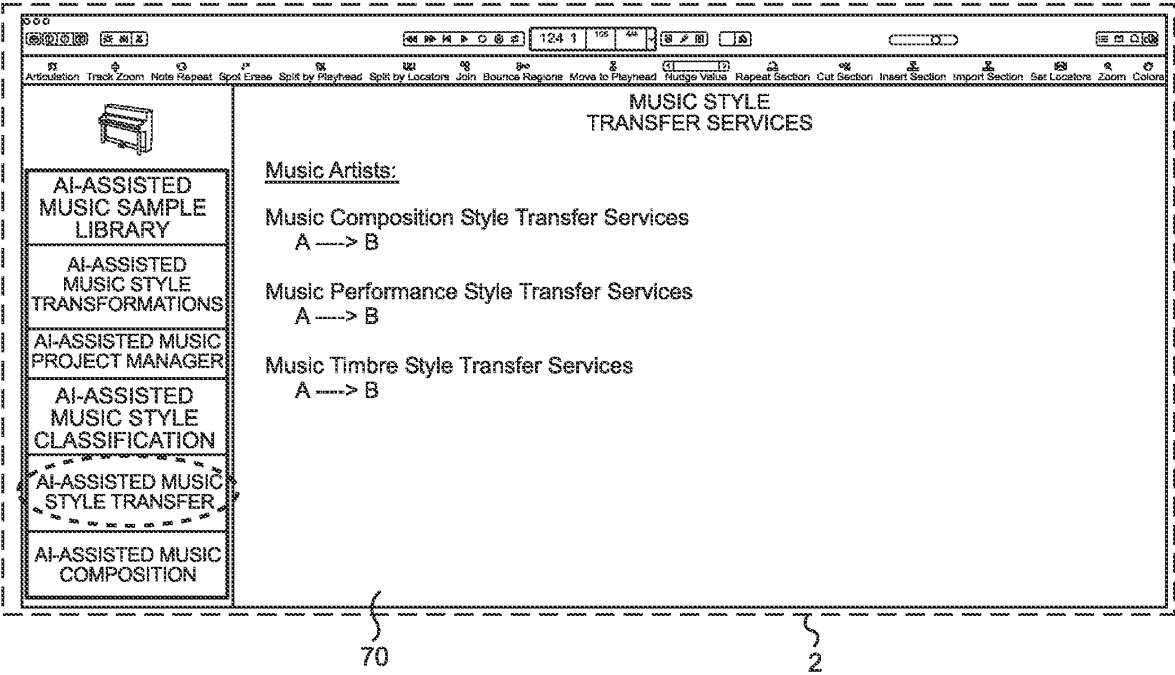
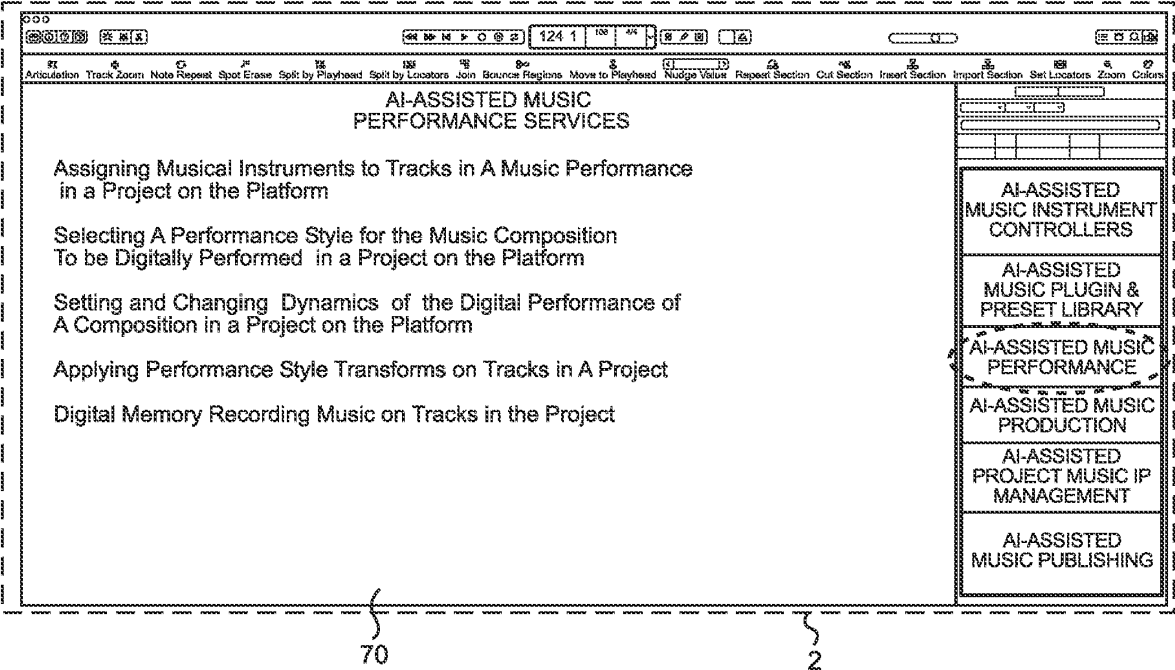
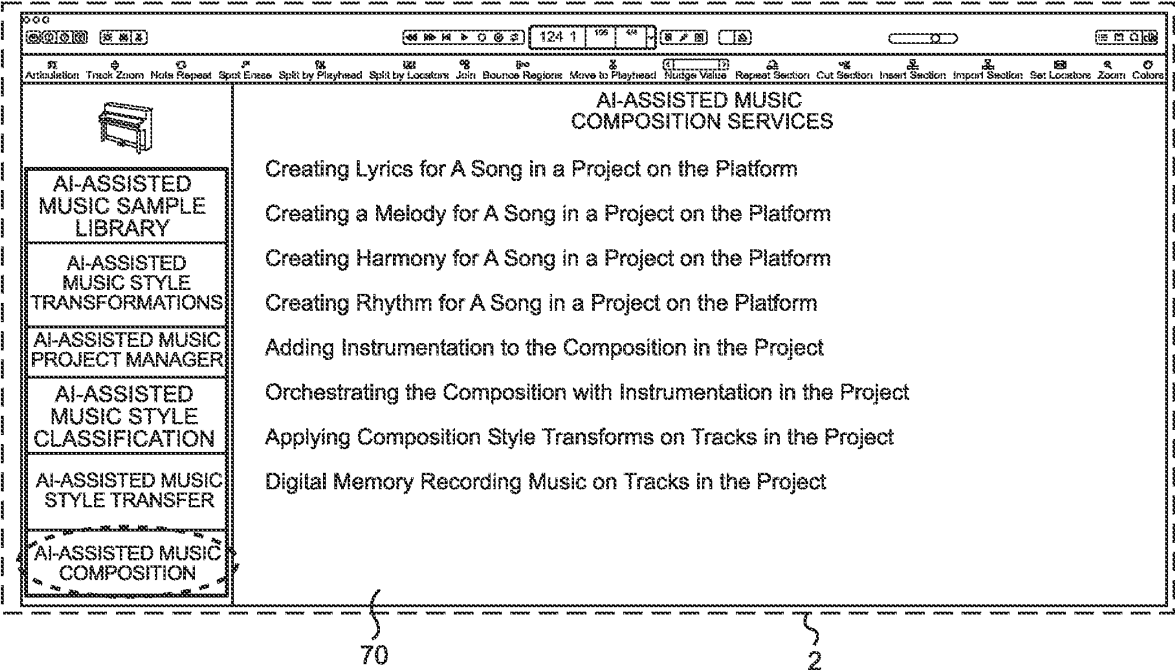


FIG. 21C







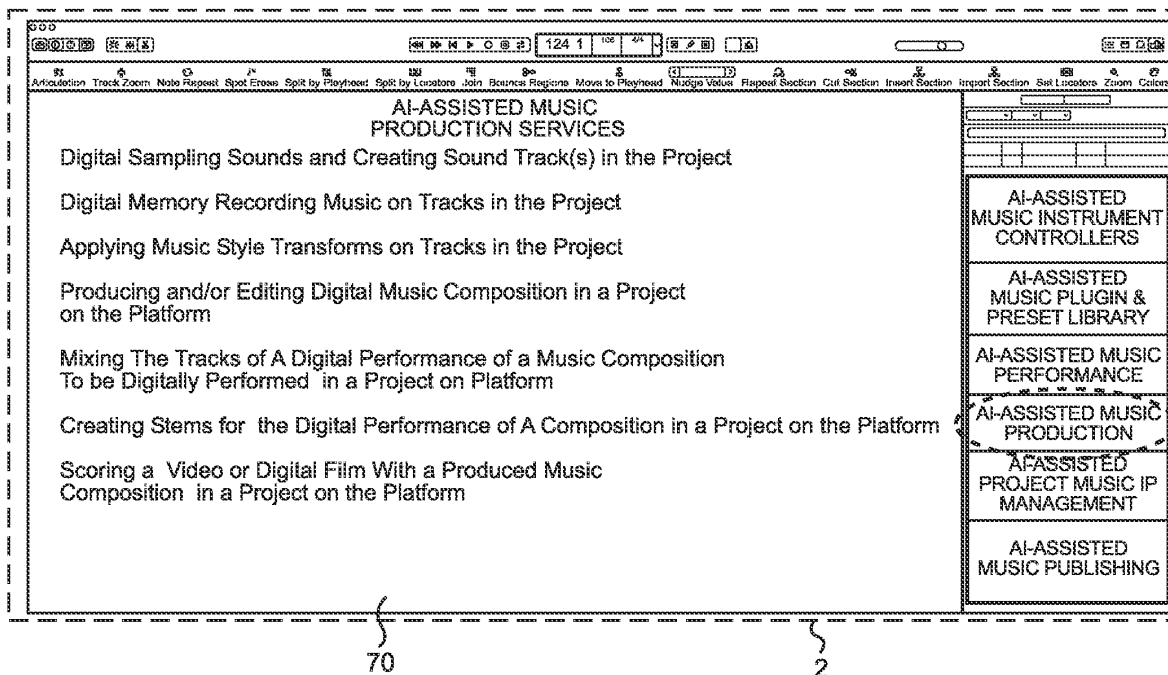


FIG. 21H

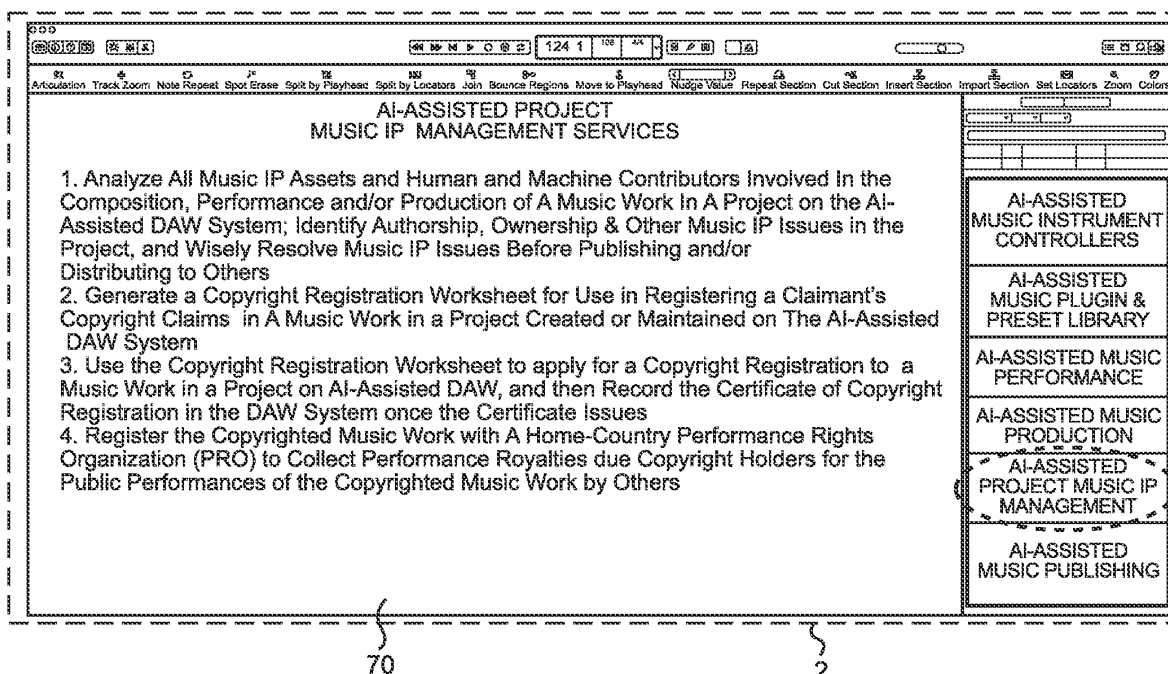


FIG. 21I

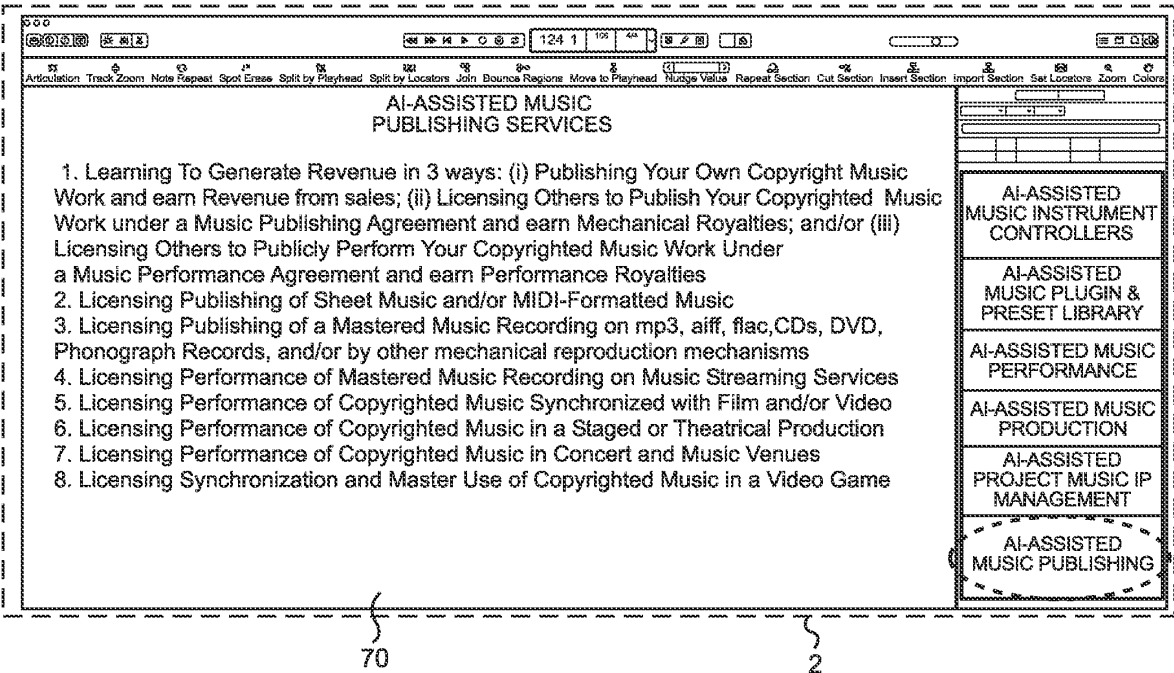


FIG. 21J

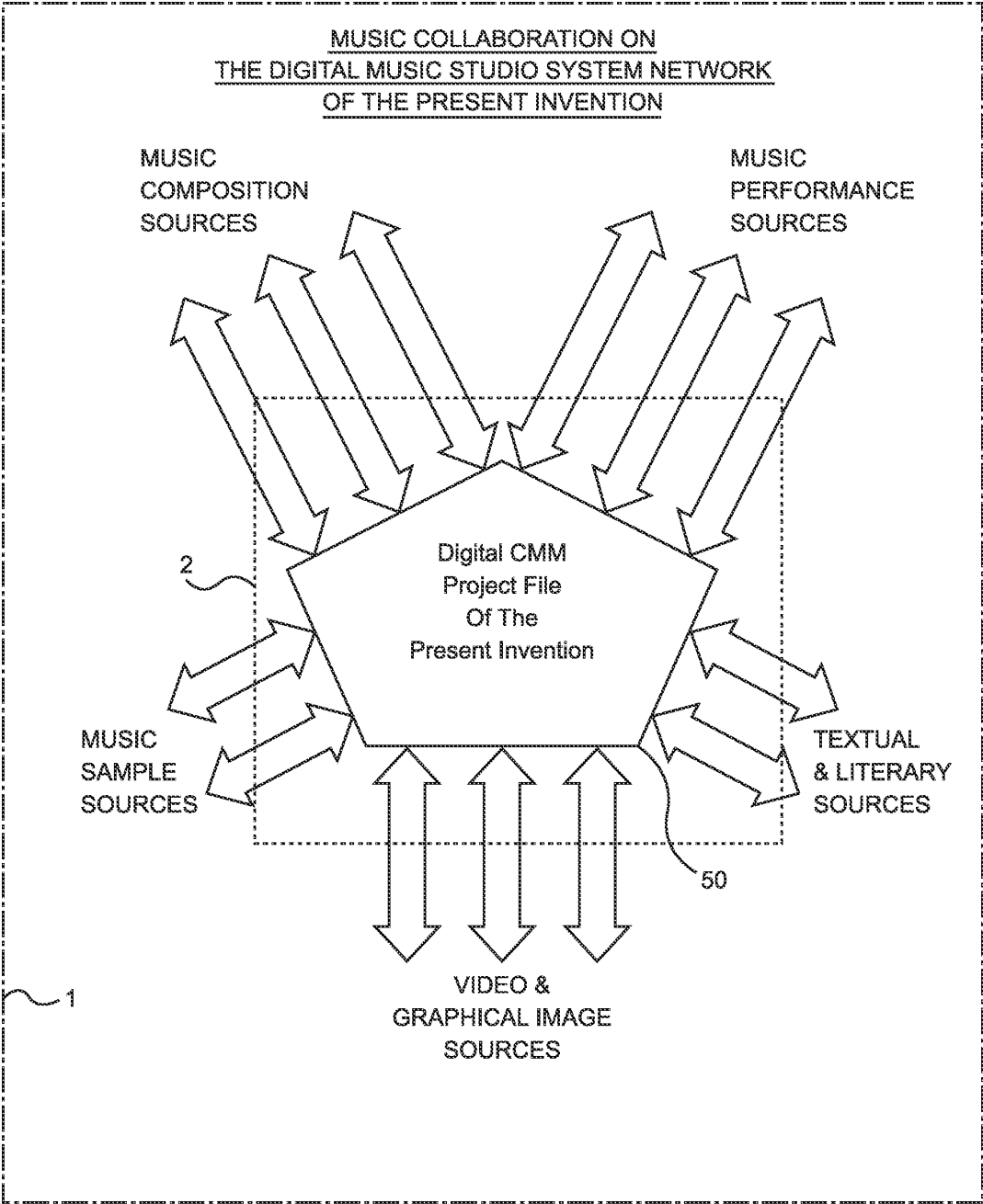


FIG. 22

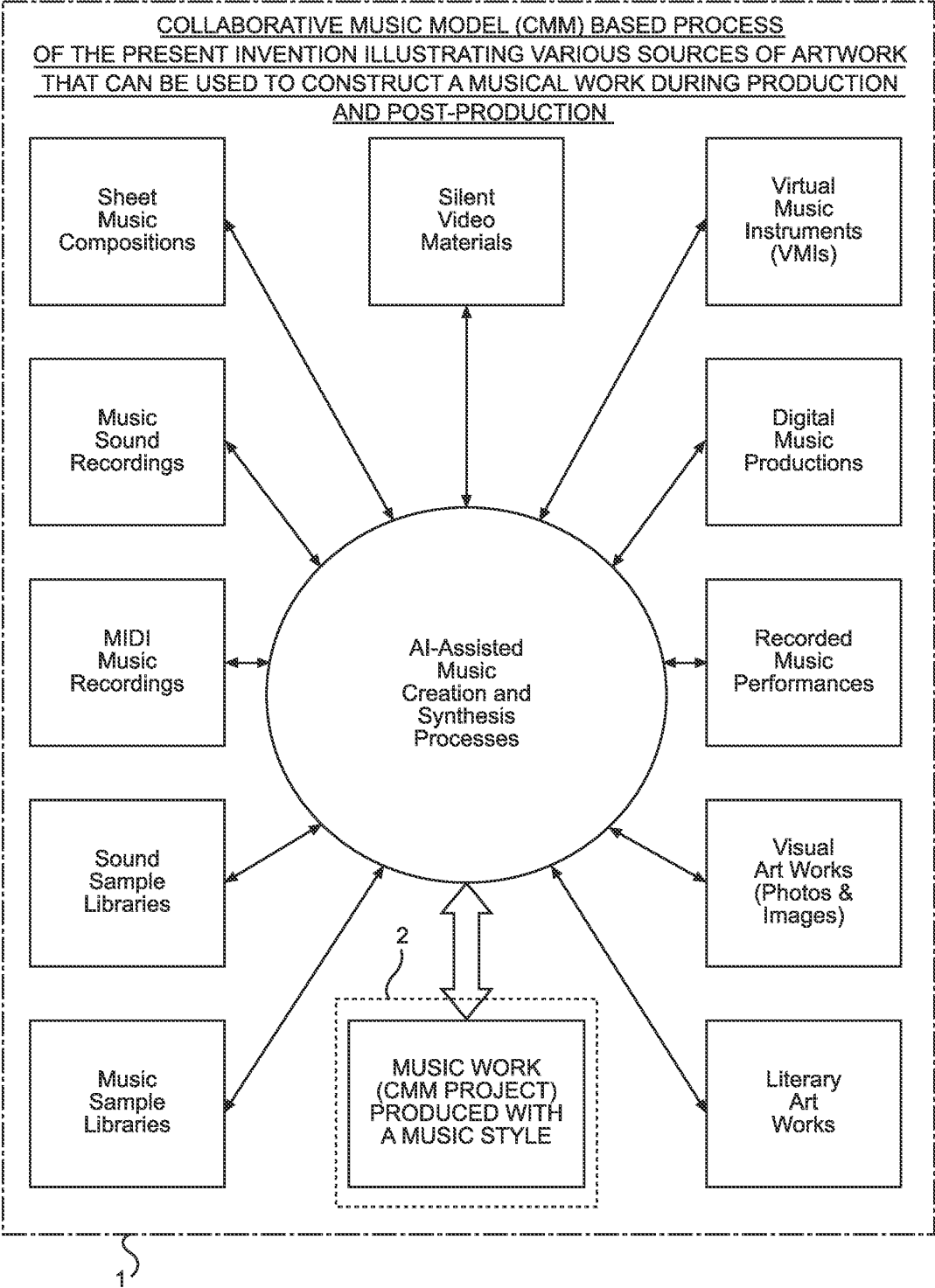


FIG. 23

DATA ELEMENTS OF A DIGITAL CMM PROJECT FILE
ACCORDING TO THE PRESENT INVENTION (CMM FORMAT)
(PART A)

Project Name:
Project Type;
Project Date Created:
Last Modified:
Project Creator/Administrator:

50

Title of Music Composition Work; Nature of Work; Date of Creation
Composer(s) of Musical Pieces in the Music Composition; Contact Info;
Composer(s) of Sampled Music Pieces Used in the Music Composition
Editor(s) involved in Music Notation
Scriber(s) involved in Producing Music Score Sheets;
Sessions; Dates; Tracks Created/Modified; Studio Settings; Tuning(s) Used;
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation
Data (and Meta-Data) Associated with Music Composition and its Process

Title of Music Production Work; Nature of Work; Date of Creation
Composers of Music used in producing the Music Production; Contact Info;
Producer(s) of Music Using VMIs, Real Music Instruments, and/or Vocals;
Producers of Sampled Music/Beats used in the Music Production;
Engineer(s) and Staff involved in Recording the Music Production
Engineer(s) and Staff involved in Mixing/Editing the Music Production
Engineer(s) and Staff involved in Mastering the Music Production
Sessions; Dates; Tracks Created/Modified; Studio Settings; Tuning(s) Used; Reverb
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation; Data Files
Data (and Meta-Data) Associated with Music Composition and its Process

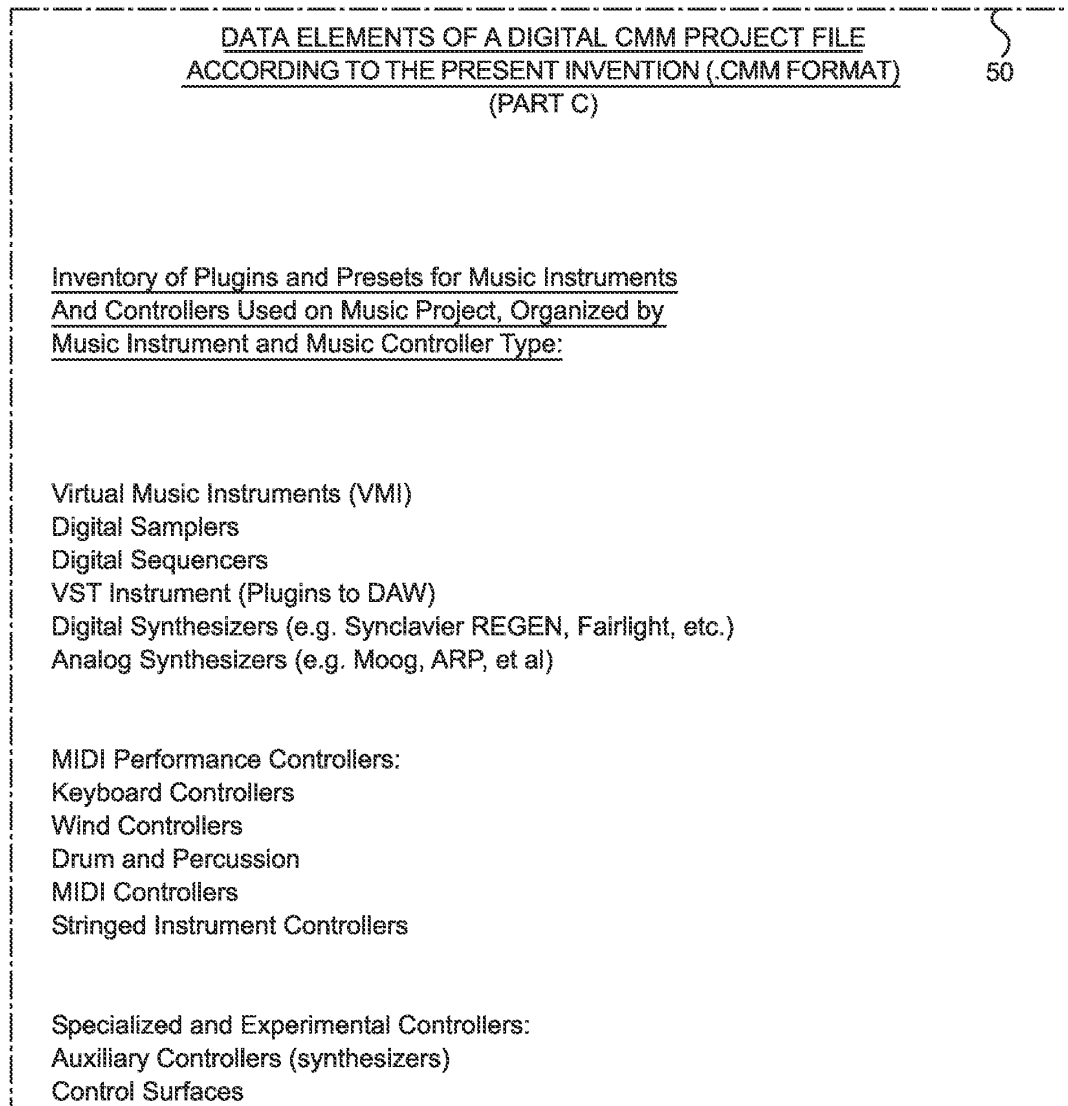
Title of Performed Music Work; Nature of Work; Date of Creation
Performer(s) of Music Using Instrument(s); Contact Info;
Composers Collaborating in the Digital Music Performance;
Engineer(s) and Staff involved in Digital Music Performance Recording Process;
Engineer(s) and Staff involved in Mixing/Editing the Digital Music Performance
Engineer(s) and Staff Involved in Mastering the Recorded Digital Music Performance;
Sessions; Dates; Tracks Created/Modified; Studio Settings; Tuning(s) Used; Reverb
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation;
Data (and Meta-Data) Associated with Music Composition and its Process;

Title of Live Music Recording Work; Nature of Work; Date of Creation
Composer(s) of the Music Performed Live in Studio or Before A Live Audience;
Performer(s) of Musical Instrument(s); Contact Info;
Engineer(s) and Staff involved in Live Music Recording Process;
Engineer(s) and Staff involved in Mixing/Editing Musical Audio Recording
Engineer(s) and Staff Involved in Mastering of the Recorded Live Music Performance;
Sessions; Dates; Tracks Created/Modified; Studio Settings; Tuning(s) Used; Reverb
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation;
Data (and Meta-Data) Associated with Music Composition and its Process

FIG. 24A

DATA ELEMENTS OF A DIGITAL CMM PROJECT FILE ACCORDING TO THE PRESENT INVENTION (.CMM FORMAT) (PART B)			50
<u>Music/Artwork Sources</u> (Used or Sampled in Project):			
.midi	Music Compositions		
.sib	(Score, MIDI)	(symbolic)	
.mp4	Music Performance Recordings		
.logicx	Music Production Recordings		
.wav	Sound (Audio) Recordings		
.mp3	Music Artist Sound Recordings		
.mp3	Music Sound Effects Recordings		
.midi	MIDI Music Recordings		
.mp4	Audio/Sound Recordings		
.atmos	Spatial Audio (Dolby® Atmos™) Sound Recordings		
.mov	Video Recordings		
.jpg	Photographic Recordings		
.jpg	Graphical Artwork		
.docx	Project Notations and Comments		

FIG. 24B

**FIG. 24C**

DATA ELEMENTS OF A DIGITAL CMM PROJECT FILE
ACCORDING TO THE PRESENT INVENTION (.CMM FORMAT)
(PART D)

50

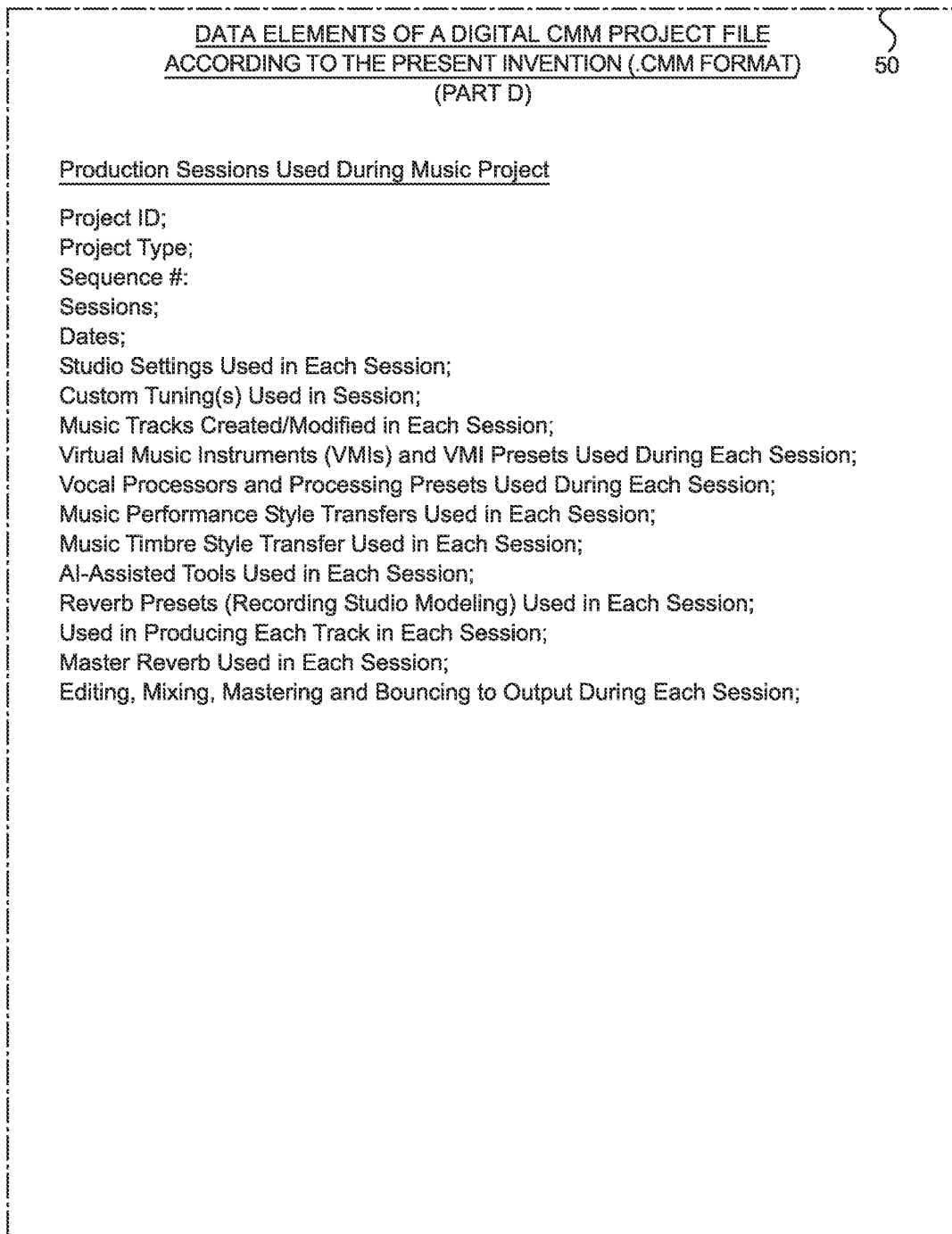
Composition Sessions During Music Project

Project ID;
Project Type;
Sequence #;
Sessions; Dates;
Name/Identity of Participants in Each Session;
Studio Settings Used in Each Session;
Music Tracks Created/Modified During Each Session (i.e. Session/Track#)
MIDI Data Recording for Each Track;
Composition Notation Tools Used During Session;
Source Materials Used in Each Session;
AI-Assisted Tools Used in Each Session;
Composition Tools Used During Each Session;
Composition Style Transfers Used in Each Session;

Performance Sessions Used During Music Project

Project ID;
Project Type;
Sequence #;
Sessions; Dates;
Name/Identity of Participants in each Session;
Studio Setting Used in Each Session;
Custom Tuning(s) Used in Each Session;
Music Tracks Created/Modified During Each Session (i.e. Session/Track#)
MIDI Data Recording for Each Track;
Real Music Instruments Used in Each Session
Music Instrument Controller (MIC) Presets Used in Each Session;
Virtual Music Instruments (VMIs) and VMI Presets Used in Each Session;
Vocal Processors and Processing Presets Used in Session;
Music Performance Style Transfers Used in Session;
Music Timbre Style Transfer Used in Session;
AI-Assisted Tools Used in Each Session;
Reverb Presets (Recording Studio Modeling) Used in Producing
Each Track in Each Session;
Master Reverb Used in Each Session;

FIG. 24D1

**FIG. 24D2**

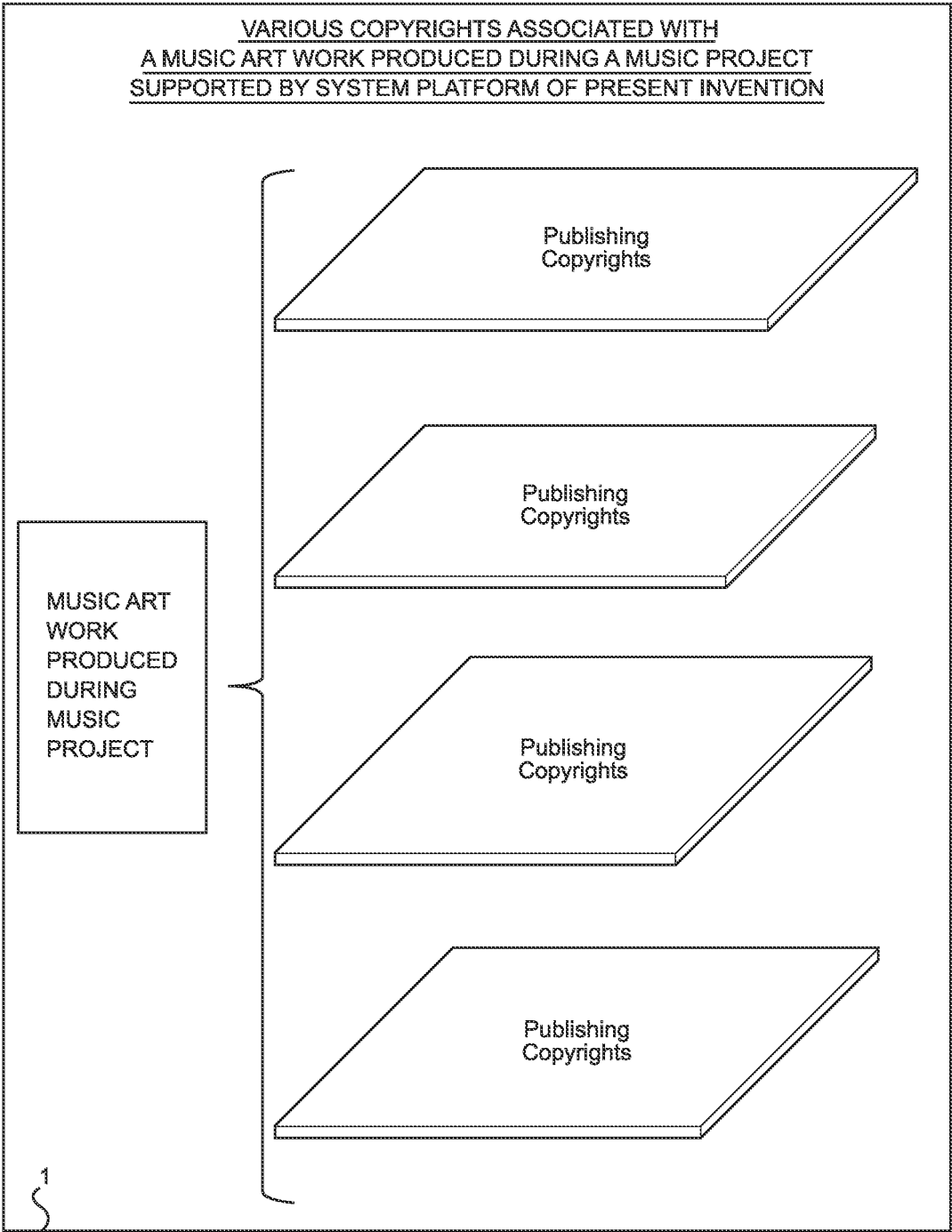


FIG. 25

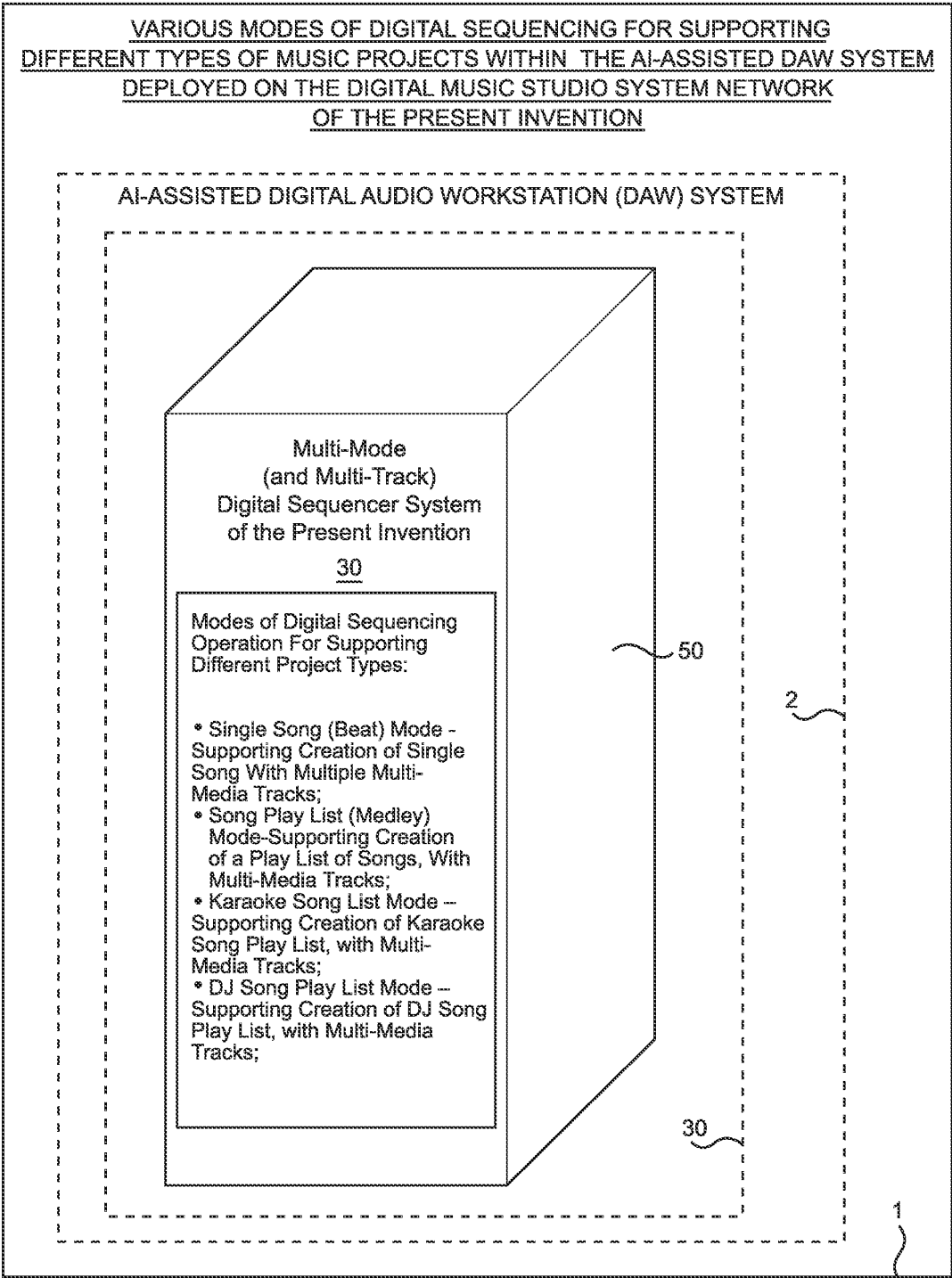


FIG. 25A

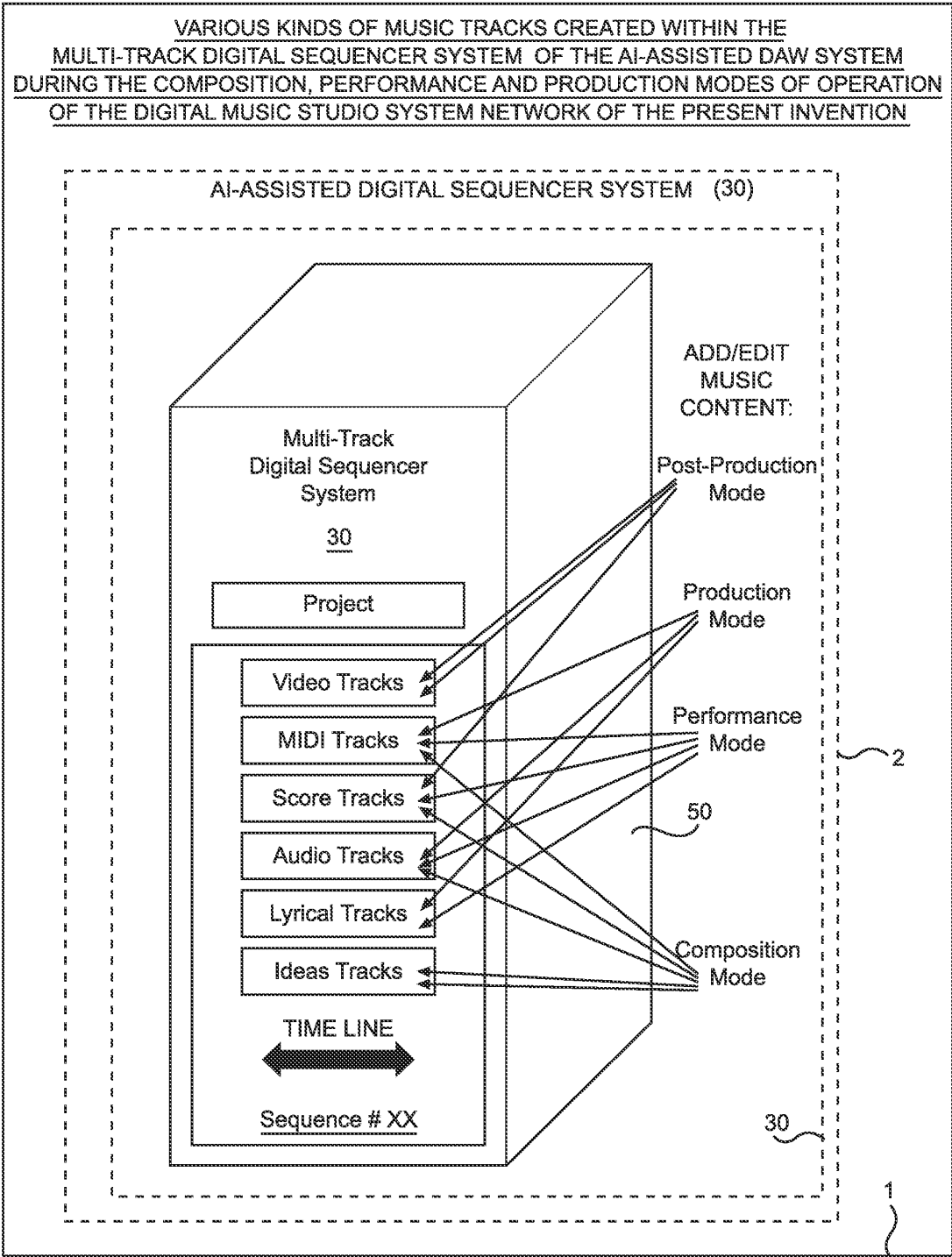


FIG. 25B

**MULTI-LAYER COLLABORATIVE MUSIC IP TRACKING MODEL AND DATA FILE
STRUCTURE FOR MUSICAL WORKS CREATED ON THE MUSIC SYSTEM NETWORK
OF THE PRESENT INVENTION USING AI-ASSISTED CREATIVE AND TECHNICAL SERVICES**

Multiple Layers of Copyrights Associated With A Digital Music Production Produced on the DAW of the Present Invention in a Studio;

Title of Work; Nature of Work; Date of Creation
Composers of Music used in producing the Music Production;
Producer(s) of Music Using VMIs, Real Music Instruments, and/or Vocals;
Producers of Sampled Music/Beats used in the Music Production;
Engineer(s) and Staff involved in Recording the Music Production
Engineer(s) and Staff involved in Mixing/Editing the Music Production
Engineer(s) and Staff involved in Mastering the Music Production;
AI-Assisted Services and AI-Created Sources of Music Material; Publisher(s);
Distributors; Sales; Royalties and Copyright Compensation

Multiple Layers of Copyrights Associated With A Digital Music Performance Recorded on the DAW of The Present Invention in A Music Recording Studio;

Title of Work; Nature of Work; Date of Creation
Performer(s) of Music Using Instrument(s);
Composers Collaborating in the Digital Music Performance;
Engineer(s) and Staff involved in Digital Music Performance Recording Process;
Engineer(s) and Staff involved in Mixing/Editing the Digital Music Performance
Engineer(s) and Staff Involved in Mastering the Recorded Digital Music Performance;
AI-Assisted Services and AI-Created Sources of Music Material; Publisher(s);
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation

Multiple Layers of Copyrights Associated With A Live Music Performance Recorded on the DAW of The Present Invention in A Performance Hall or Music Recording Studio;

Title of Work; Nature of Work; Date of Creation
Composer(s) of the Music Performed Live in Studio or Before A Live Audience;
Performer(s) of Musical Instrument(s);
Engineer(s) and Staff involved in Live Music Recording Process;
Engineer(s) and Staff involved in Mixing/Editing Musical Audio Recording
Engineer(s) and Staff Involved in Mastering of the Recorded Live Music Performance;
AI-Assisted Services and AI-Created Sources of Music Material; Publisher(s);
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation

Multiple Layers of Copyrights Associated With A Music Composition Recorded in Sheet Music Format Or MIDI Music Notation on the DAW of The Present Invention;

Title of Work; Nature of Work; Date of Creation
Composer(s) of Musical Pieces in the Music Composition;
Composer(s) of Sampled Music Pieces Used in the Music Composition Editor(s) involved in Music Notation; Scriber(s) involved in Producing Music Score Sheets;
AI-Assisted Services and AI-Created Sources of Music Material;
Publisher(s); Distributors; Sales; Royalties and Copyright Compensation

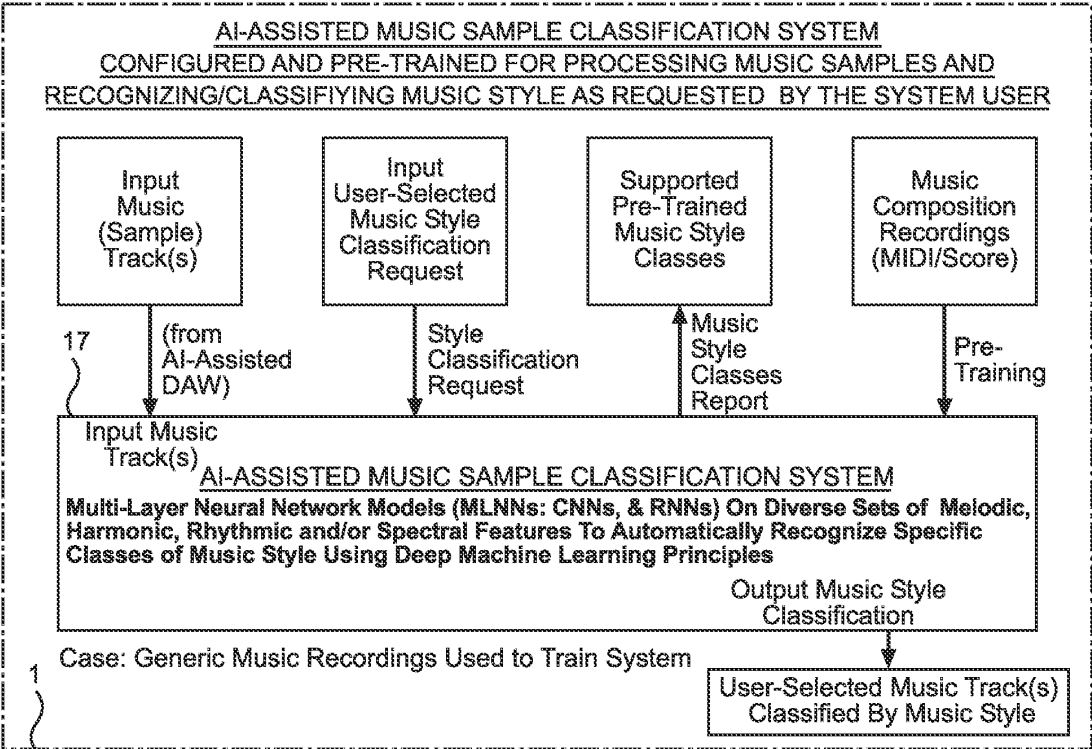
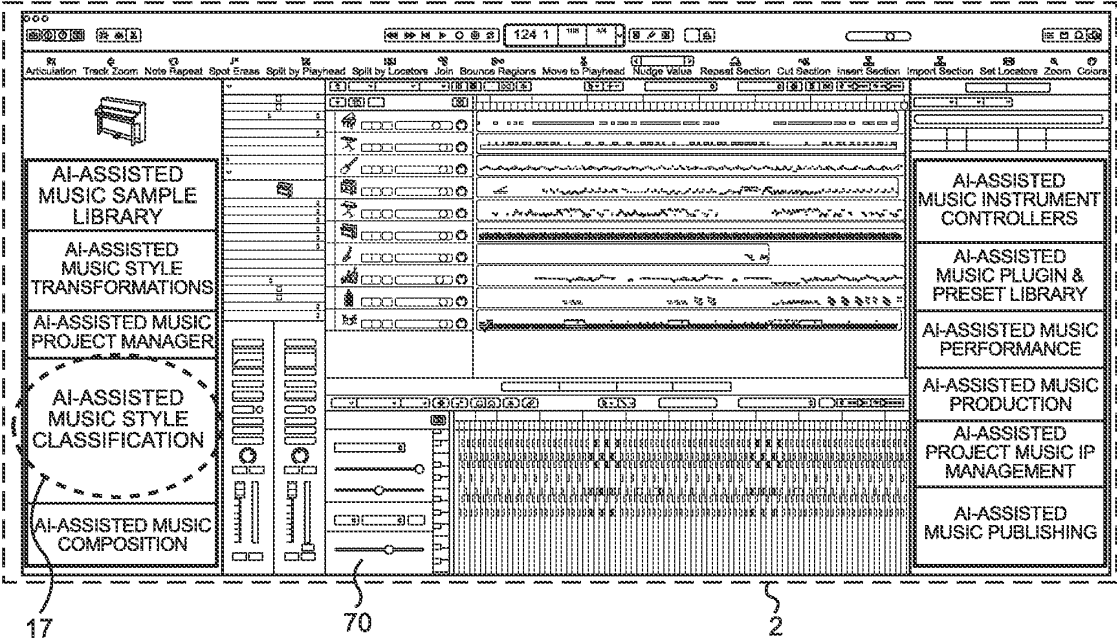
1

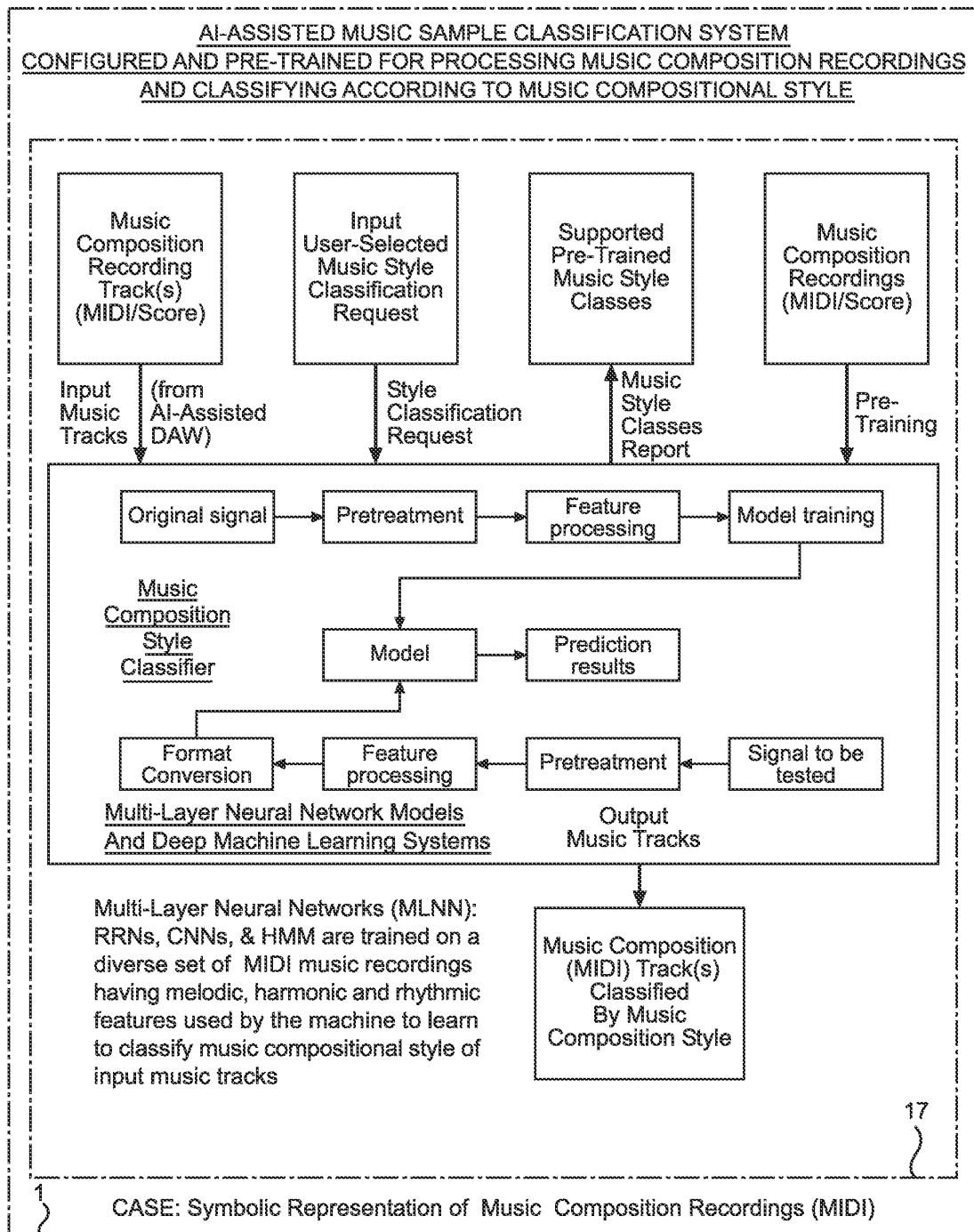
FIG. 26

SCHEMATIC FOR MULTI-LAYER COLLABORATIVE MUSIC IP ISSUE TRACKING MODEL
AND DATA FILE STRUCTURE FOR MUSICAL WORKS CREATED
ON THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION



FIG. 27



**FIG. 29A**

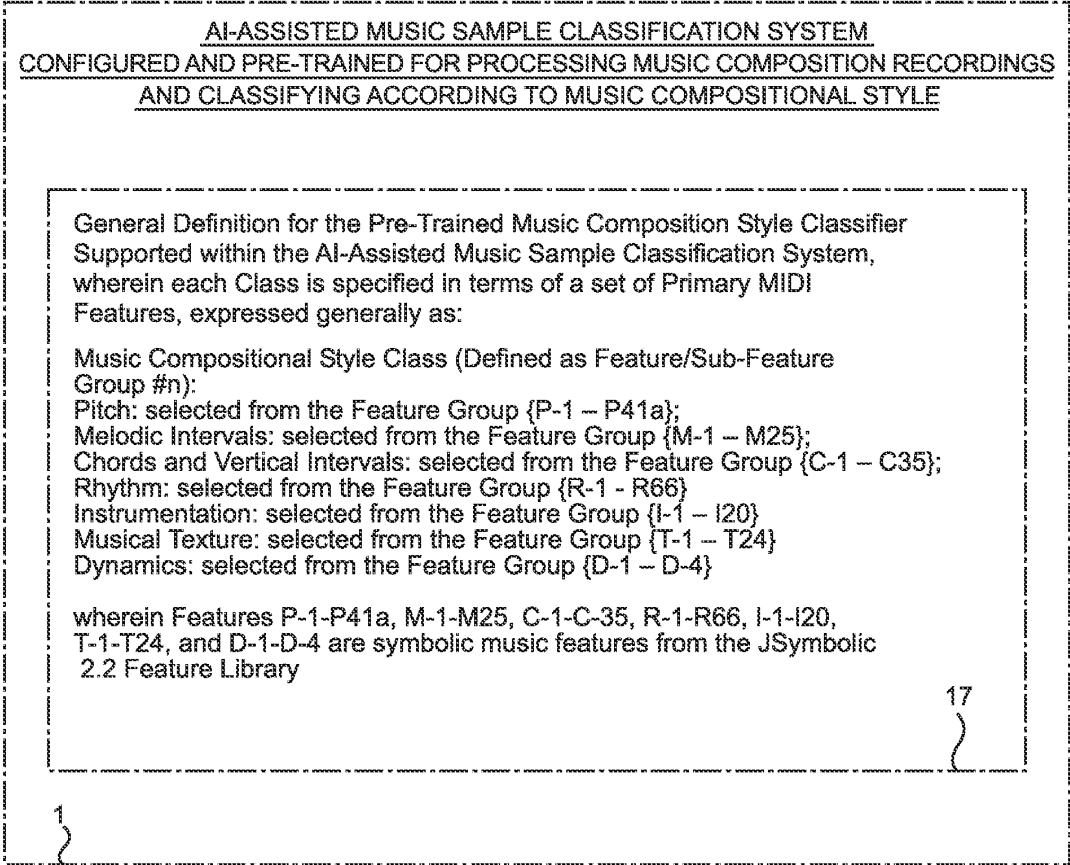


FIG. 29A1

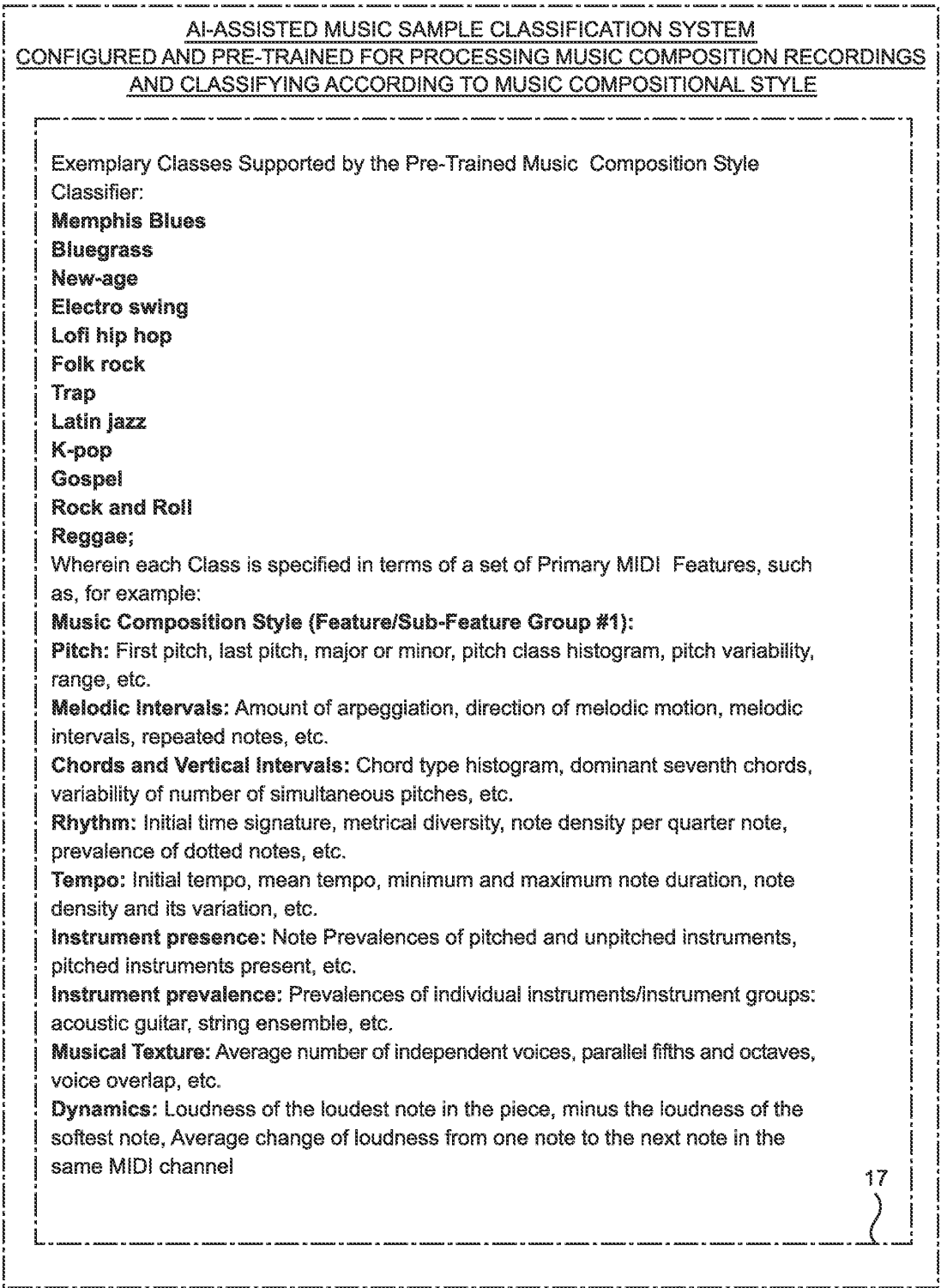
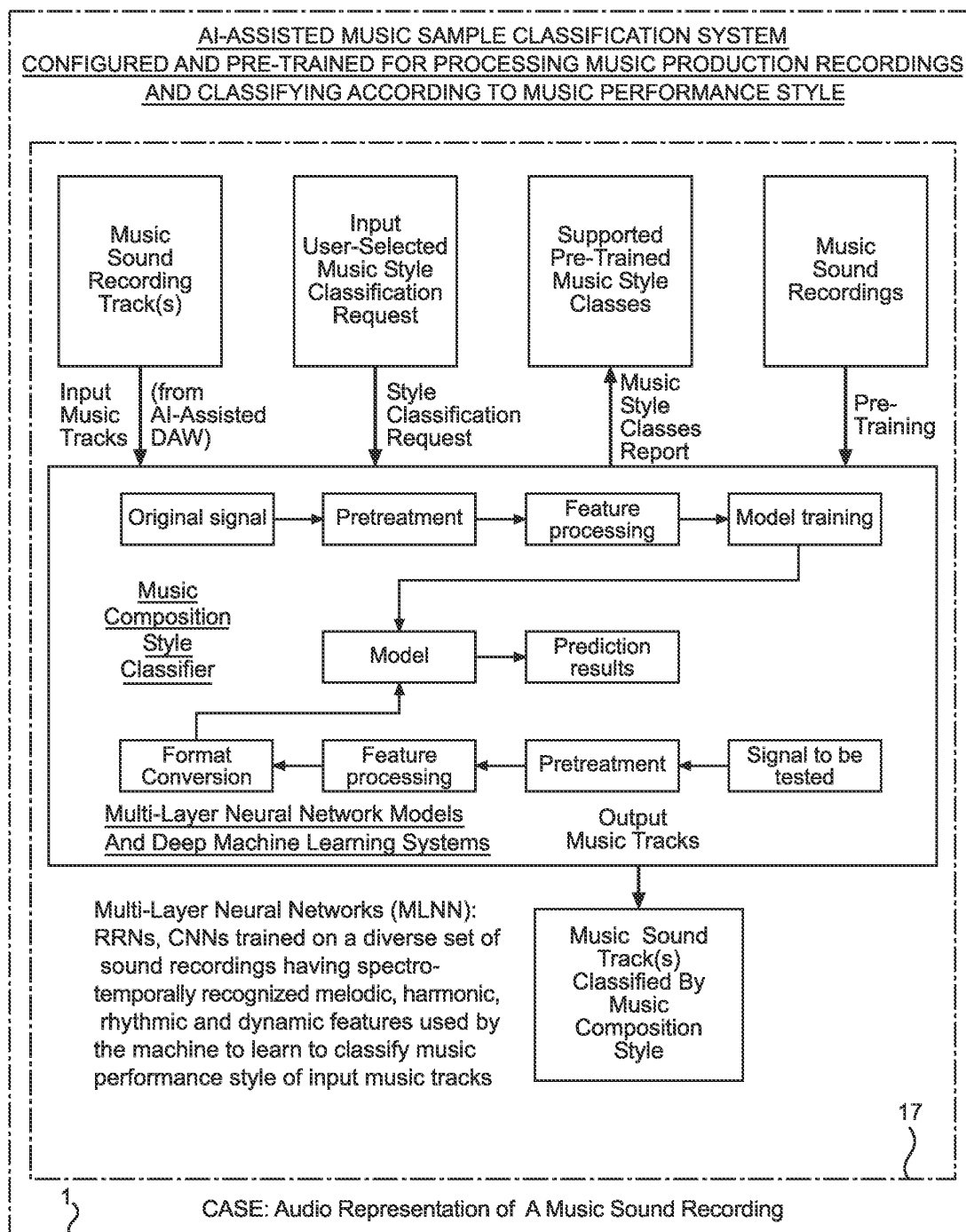


FIG. 29A2

**FIG. 29B**

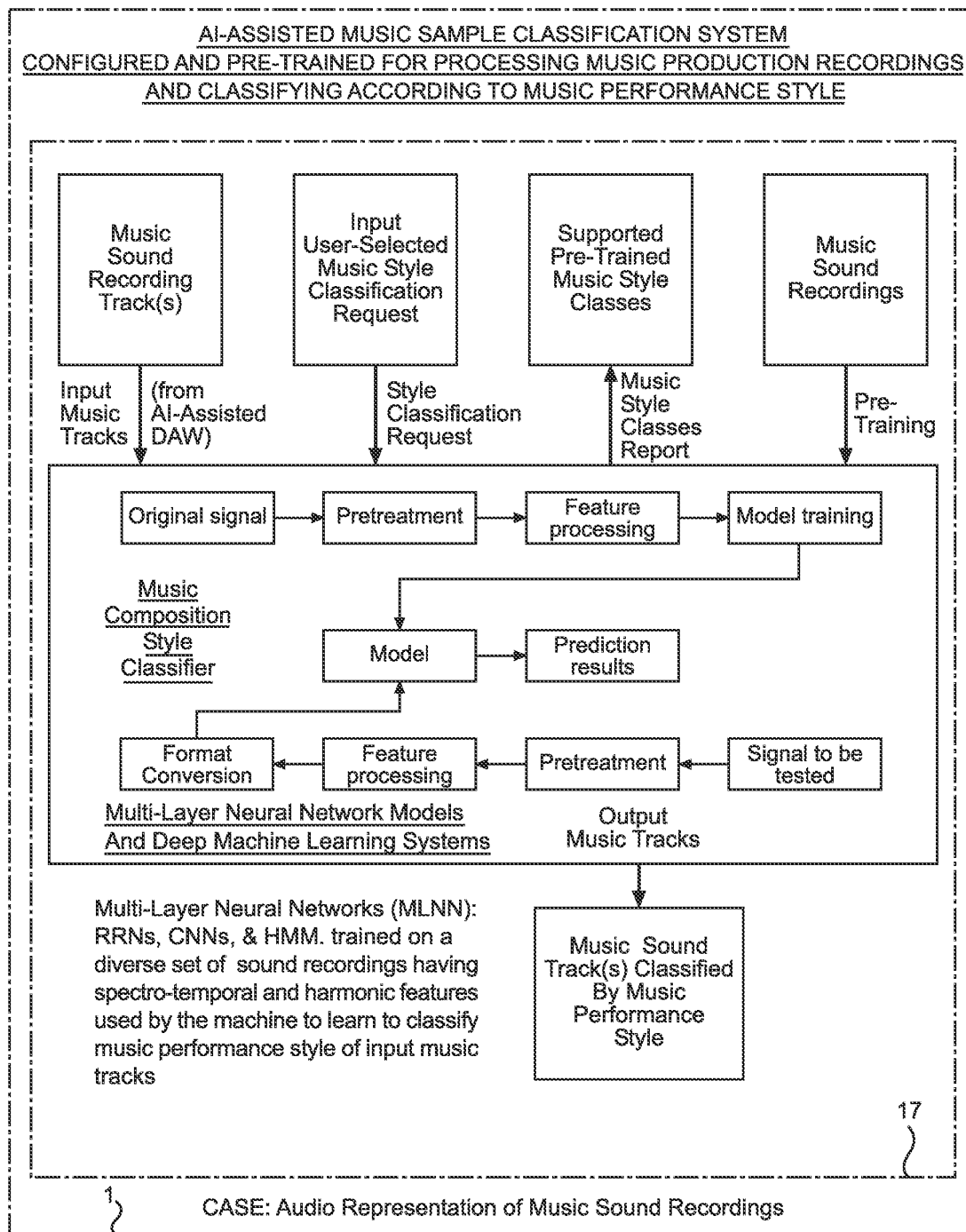


FIG. 29C

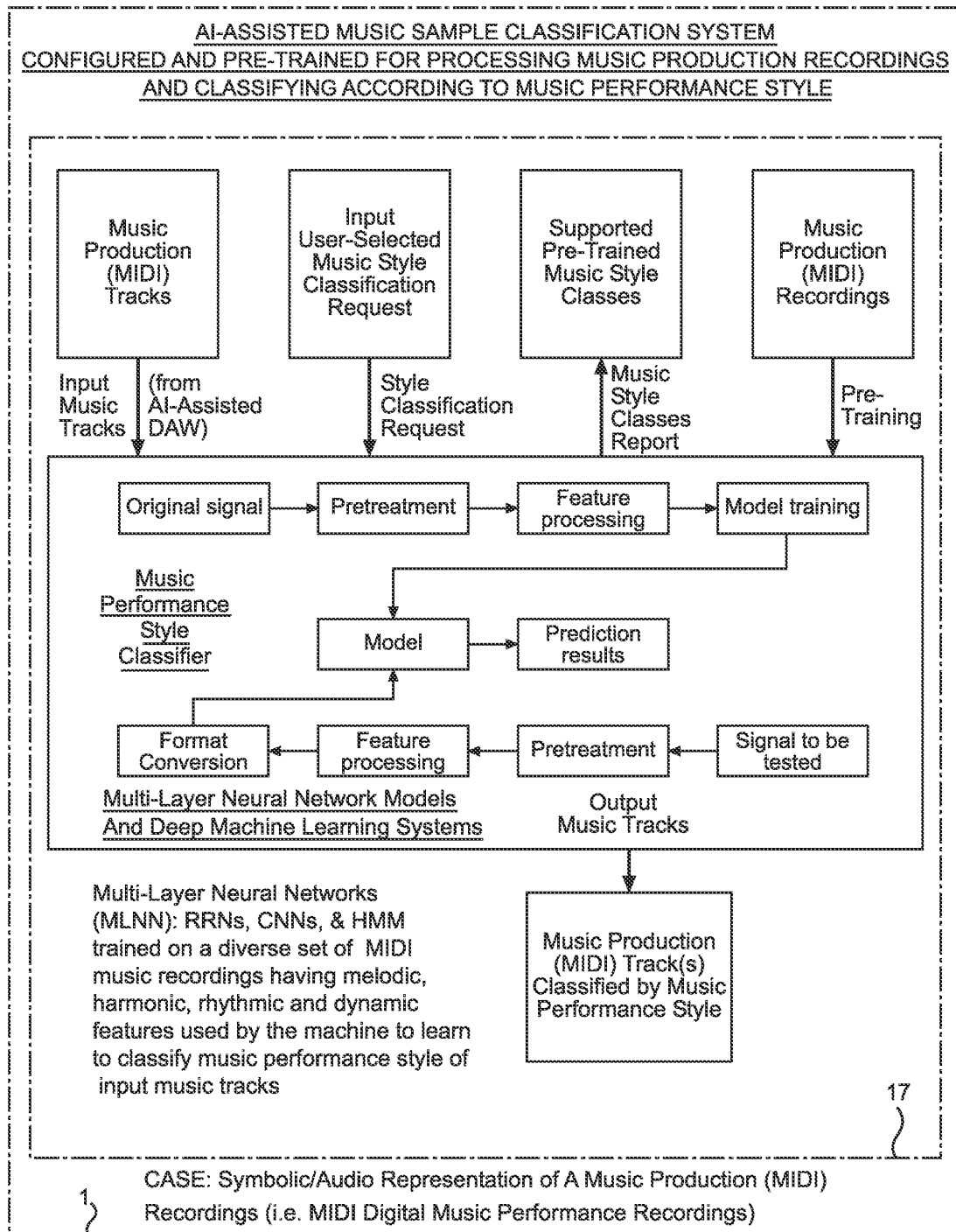


FIG. 29D

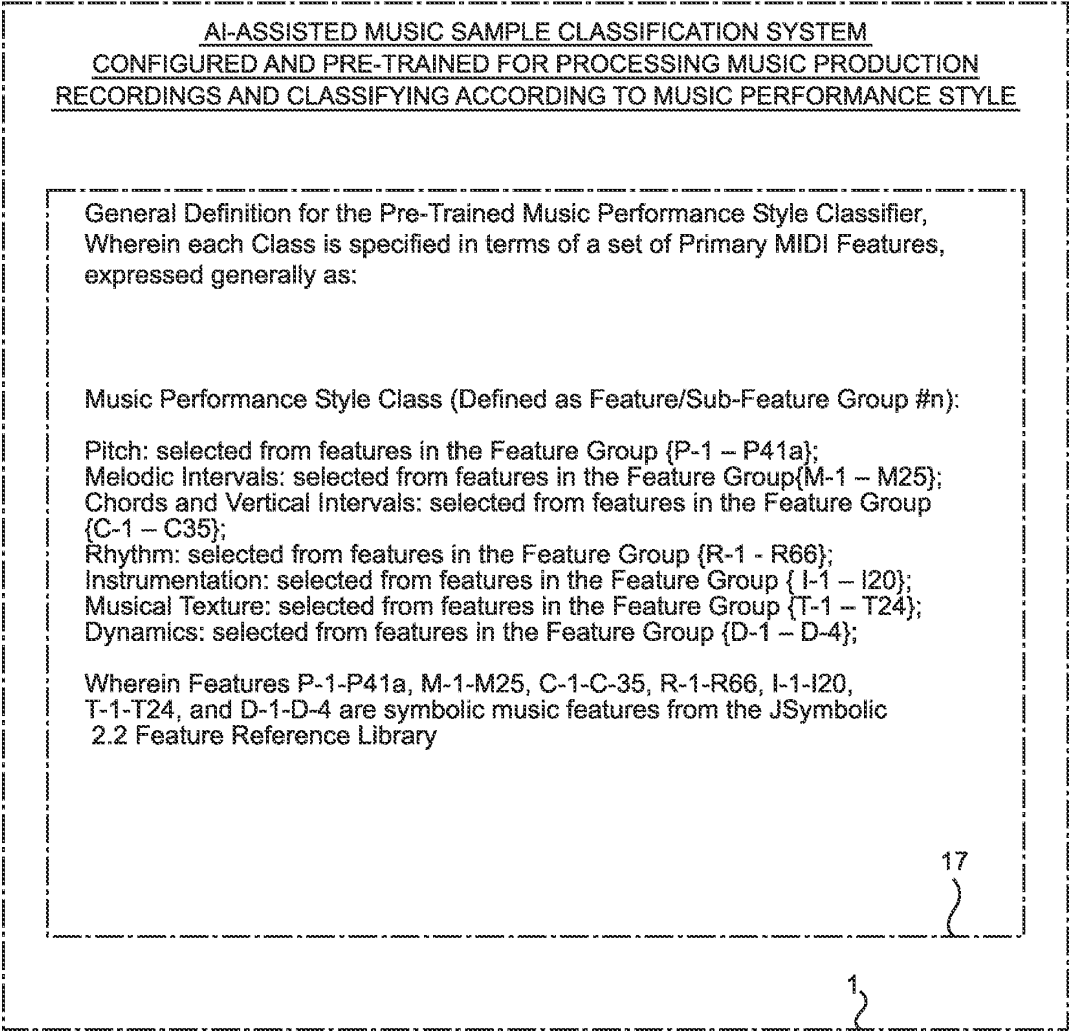


FIG. 29D1



FIG. 29D2

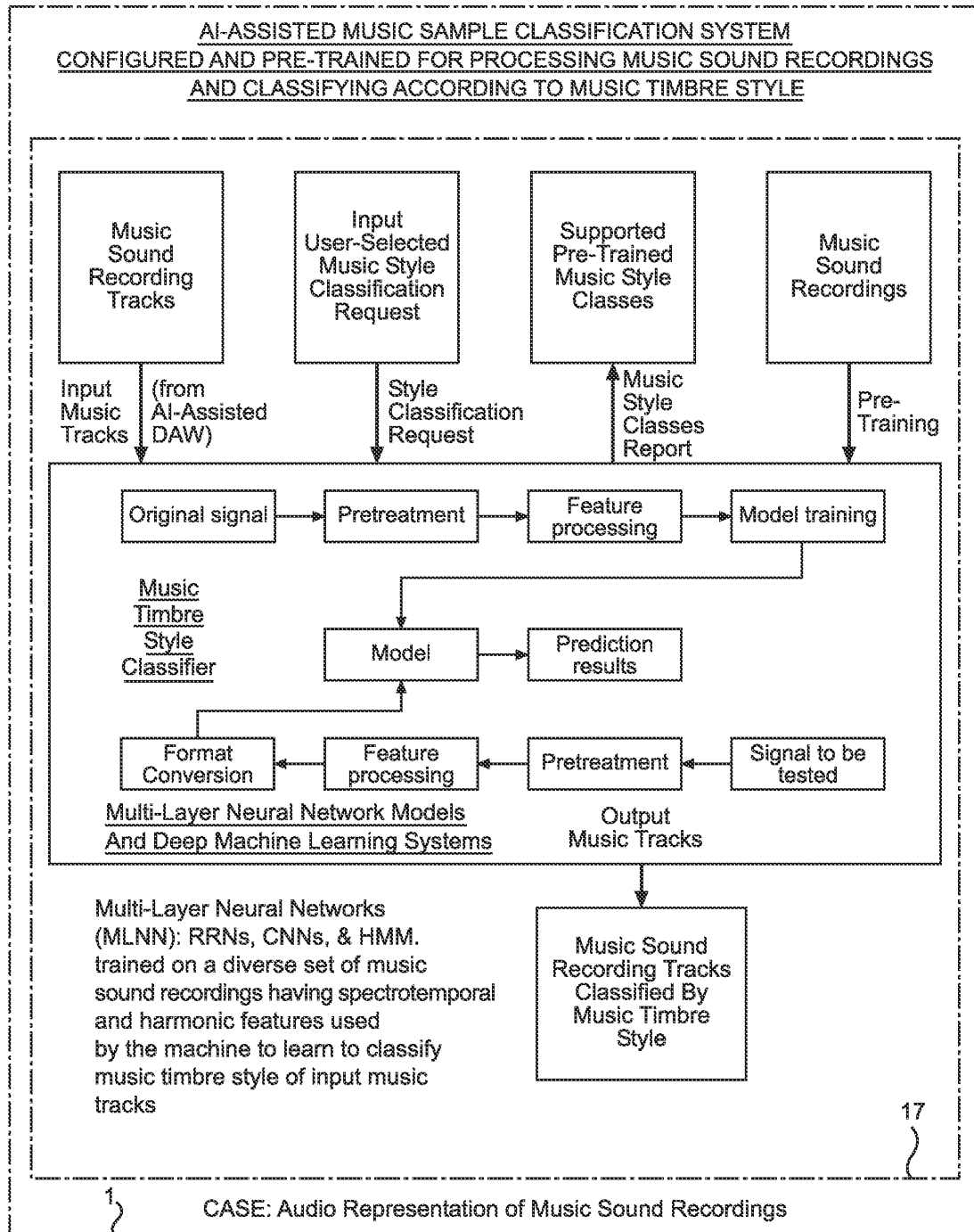


FIG. 29E

AI-ASSISTED MUSIC SAMPLE CLASSIFICATION SYSTEM
CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC SOUND RECORDINGS
AND CLASSIFYING ACCORDING TO MUSIC TIMBRE STYLE

General Definition for the Pre-Trained Music Timbre Style Classifier,
Wherein each Class is specified in terms of a set of spectro-temporally based
Primary Features, expressed generally as:

Music Timbre Style Class (Defined as Feature/Sub-Feature Group #n):

Pitch: selected from the spectro-temporal features reflected in Feature Group {P-1 – P41a};

Melodic Intervals: selected from spectro-temporally-recognized features in the Feature Group {M-1 – M25};

Chords and Vertical Intervals: selected from spectro-temporally-recognized features in the Feature Group {C-1 – C35};

Rhythm: selected from spectro-temporally-recognized features in the Feature Group {R-1 - R66};

Instrumentation: selected from spectro-temporally-recognized features in the Feature Group {1-120};

Musical Texture: selected from spectro-temporally-recognized features in the Feature Group {T-1 – T24};

Dynamics: selected from spectro-temporally-recognized features in the Feature Group {D-1 – D-4};

Wherein Features P-1-P41a, M-1-M25, C-1-C-35, R-1-R66, I-1-I20, T-1-T24, and D-1-D-4 are symbolic music features defined in the JSymbolic 2.2 Feature Reference Library

FIG. 29E1

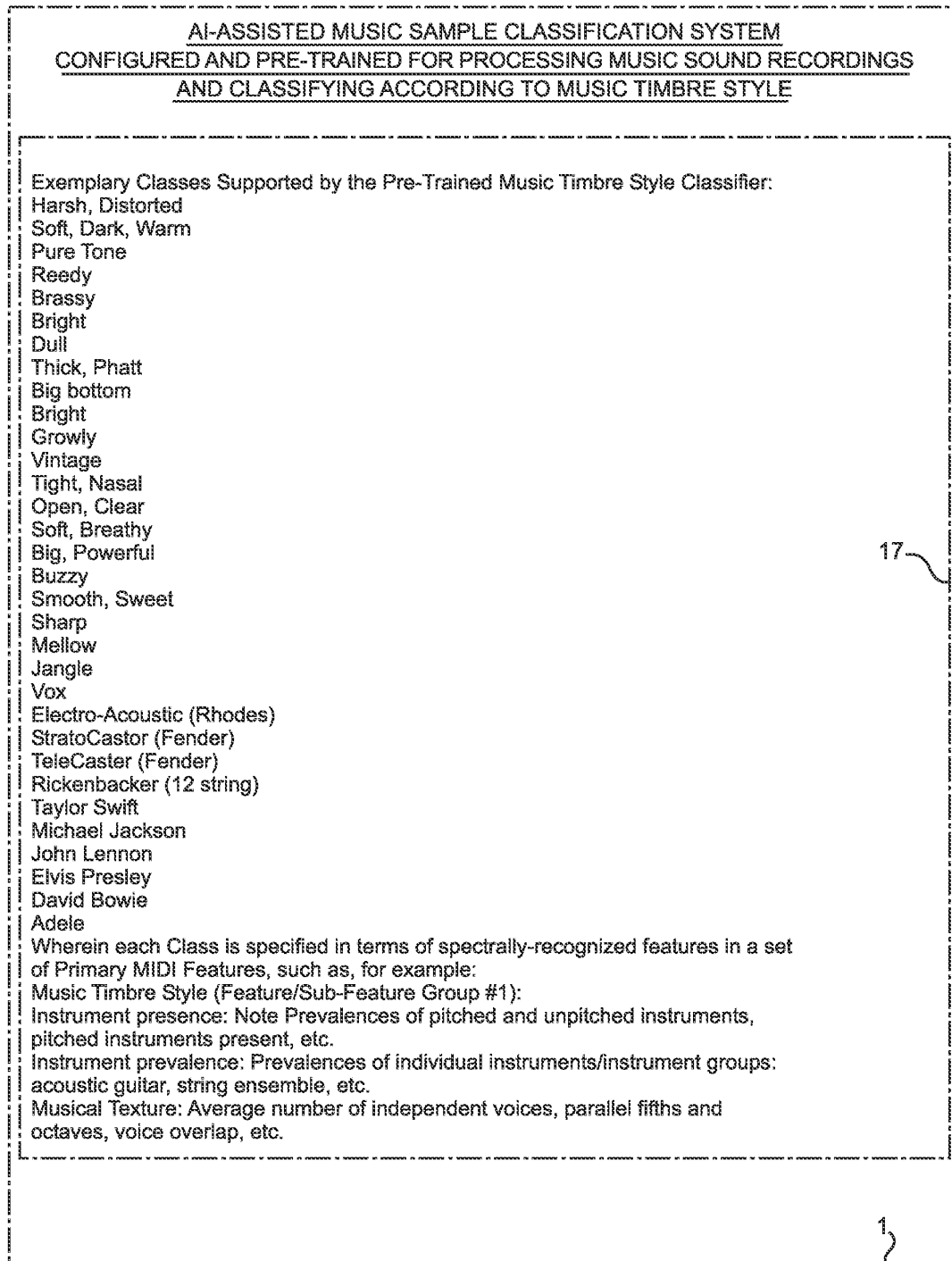
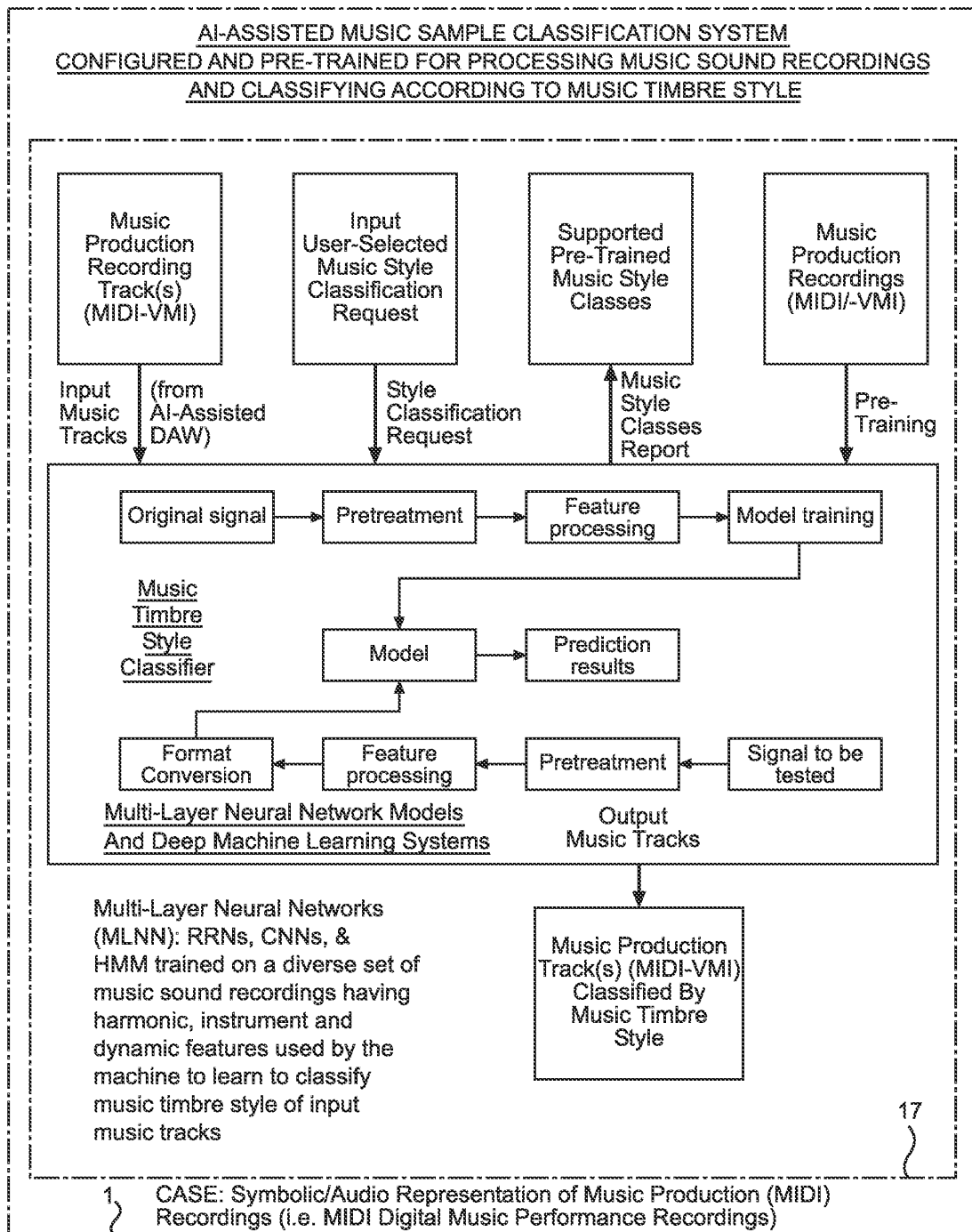


FIG. 29E2

**FIG. 29F**

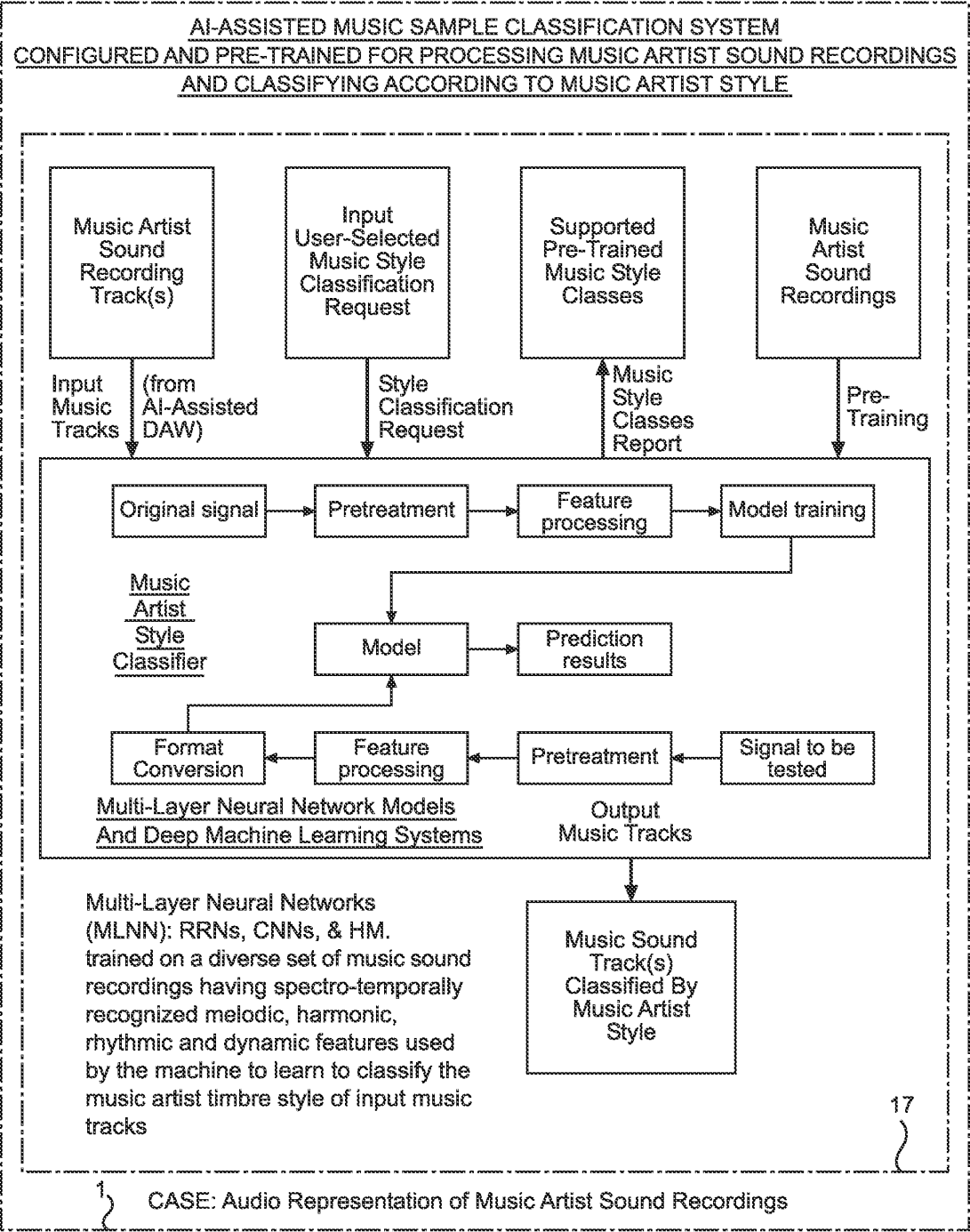


FIG. 29G

AI-ASSISTED MUSIC SAMPLE CLASSIFICATION SYSTEM
CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC ARTIST SOUND
RECORDINGS AND CLASSIFYING ACCORDING TO MUSIC ARTIST STYLE

General Definition for the Pre-Trained Music Artist Style Classifier,
 Wherein each Class is specified in terms of a set of of spectro-temporally
 based Primary MIDI Features, expressed generally as:

Music Artist Style Class (Defined as Feature/Sub-Feature Group #n):

Pitch: selected from the spectro-temporal features reflected in Feature
 Group {P-1 – P41a};

Melodic Intervals: selected from the spectro-temporal features reflected
 in Feature Group {M-1 – M25};

Chords and Vertical Intervals: selected from the spectro-temporal features
 reflected in Feature Group {C-1 – C35};

Rhythm: selected from the spectro-temporal features reflected in Feature
 Group {R-1 – R66};

Instrumentation: selected from the spectro-temporal features reflected in
 Feature Group {I-1 – I20};

Musical Texture: selected from the spectro-temporal features reflected in
 Feature Group {T-1 – T24};

Dynamics: selected from the spectro-temporal features reflected in
 Feature Group {D-1 – D-4};

Wherein Features P-1-P41a, M-1-M25, C-1-C-35, R-1-R66, I-1-I20,
 T-1-T24, and D-1-D-4 are selected from symbolic music features
 Reflected in the JSymbolic 2.2 Feature Reference Library

17

FIG. 29G1

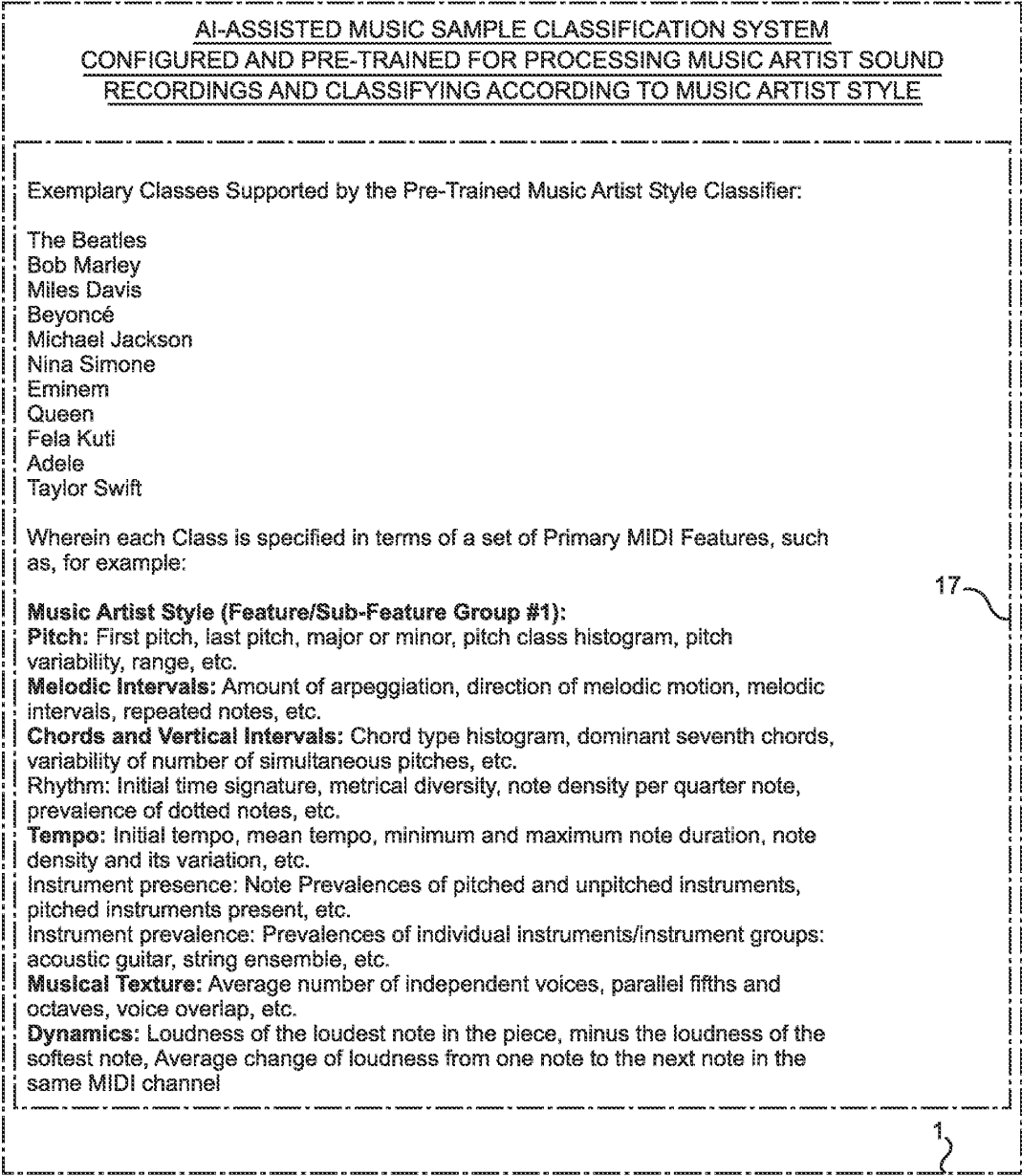
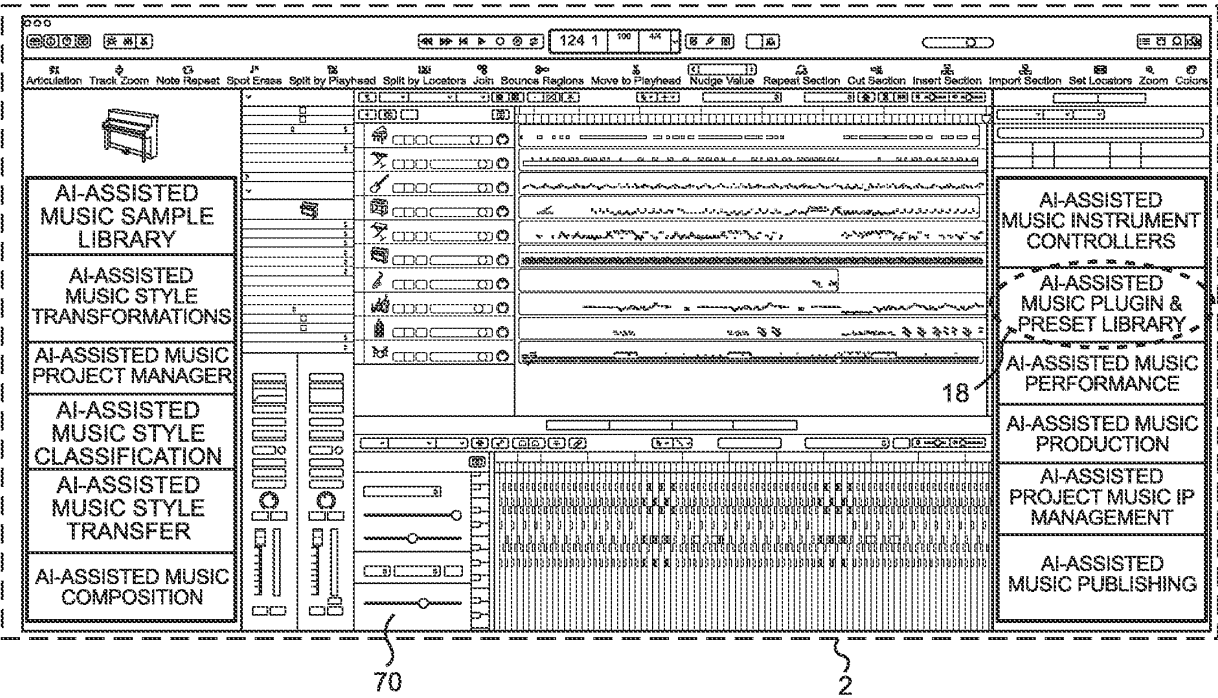


FIG. 29G2

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION



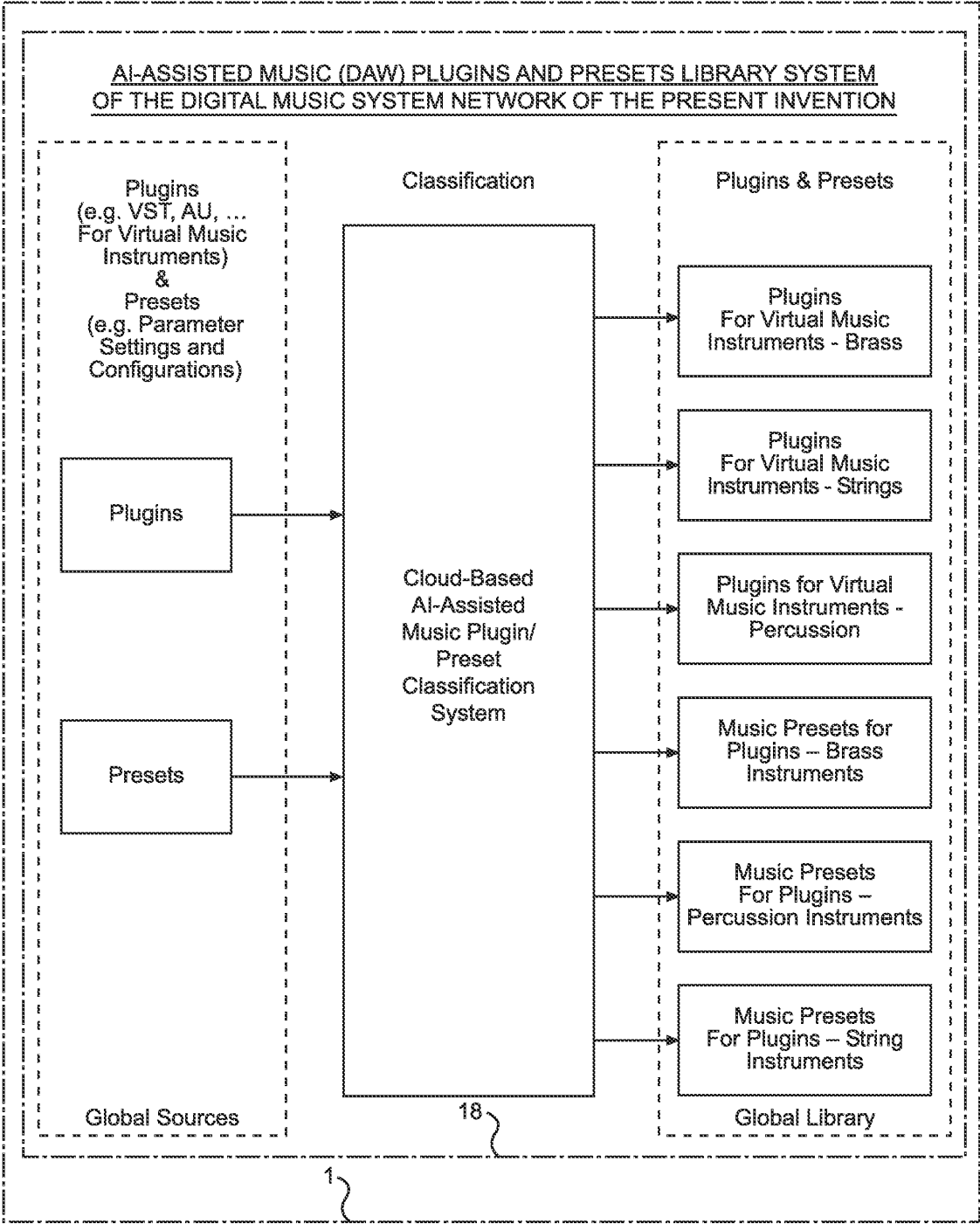
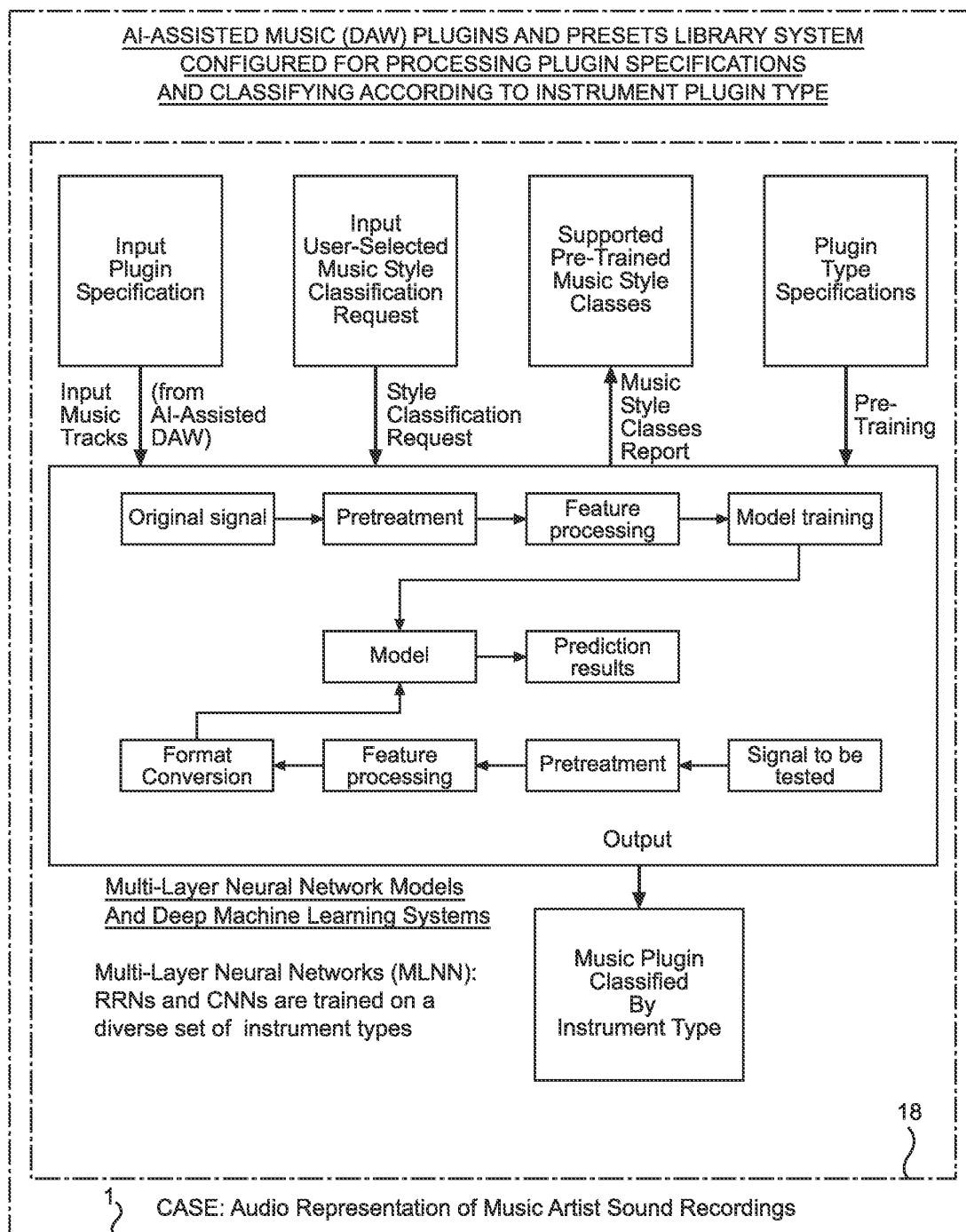


FIG. 31

**FIG. 31A**

AI-ASSISTED MUSIC (DAW) PLUGINS AND PRESETS LIBRARY SYSTEM CONFIGURED FOR PROCESSING PLUGIN SPECIFICATIONS AND CLASSIFYING ACCORDING TO INSTRUMENT TYPE

Exemplary Classes Supported by the Music Plugin Classifier, wherein each Class of Plugin Type is specified in terms of a set of Plugin Features

Exemplary Classes Supported by the Pre-Trained Music Plugin Classifier:

Virtual Instruments –“virtual” software instruments that exist in a computer or hard drive, which are played via a midi controller, allowing composers, beat producers, and songwriters to compose and produce a realistic symphony or metal songs in a digital audio workstation (DAW) without touching a physical music instrument, including:

bass module plugins

synthesizers

orchestra sample player plugins

keys (acoustic, electric, and synth)

drum and/or beat production plugins

sample player plugins

Effects Processors – for processing audio signals in a DAW by adding an effect to it a non-destructive manner, or changing it in a destructive manner, including:

time based effects plugins – for adding or extending the sound of the signal for a sense of space (reverb, delay, echo)

dynamic effects plugins – for altering the loudness/amplitude of the signal (compressor, limiter, noise-gate, and expander)

filter plugins – for boosting or attenuating sound frequencies the audio signal (EQ, hi-pass, low-pass, band-pass, talk box, wah-wah)

modulation plugins – for altering the frequency strength in the audio signal to create tonal properties (chorus, flanger, phaser, ring modulator, tremolo, vibrato)

pitch/frequency plugins – for modifying the pitches in the audio signal (pitch correction, harmonizer, doubling)

reverb plugins – for modeling the amount of reverberation musical sounds will experience in a specified environment where recording, performance, production and/or listening occurs

distortion plugins – for adding “character” to the audio signal of a hardware amp or mixing console (fuzz, warmth, clipping, grit, overtones, overdrive, crosstalk)

MIDI effects plugins - uses MIDI notes from your controller or inside your piano roll to control the effects processors

Wherein each Class is specified in terms of a set of Primary MIDI Features, such as, for example:

Music Plugin(Feature/Sub-Feature Group #1):

Instrument Type: VST, AU, AAX, RTAS, TDM,

Functions:

Manufacturer:

Release Date:

18

FIG. 31A1

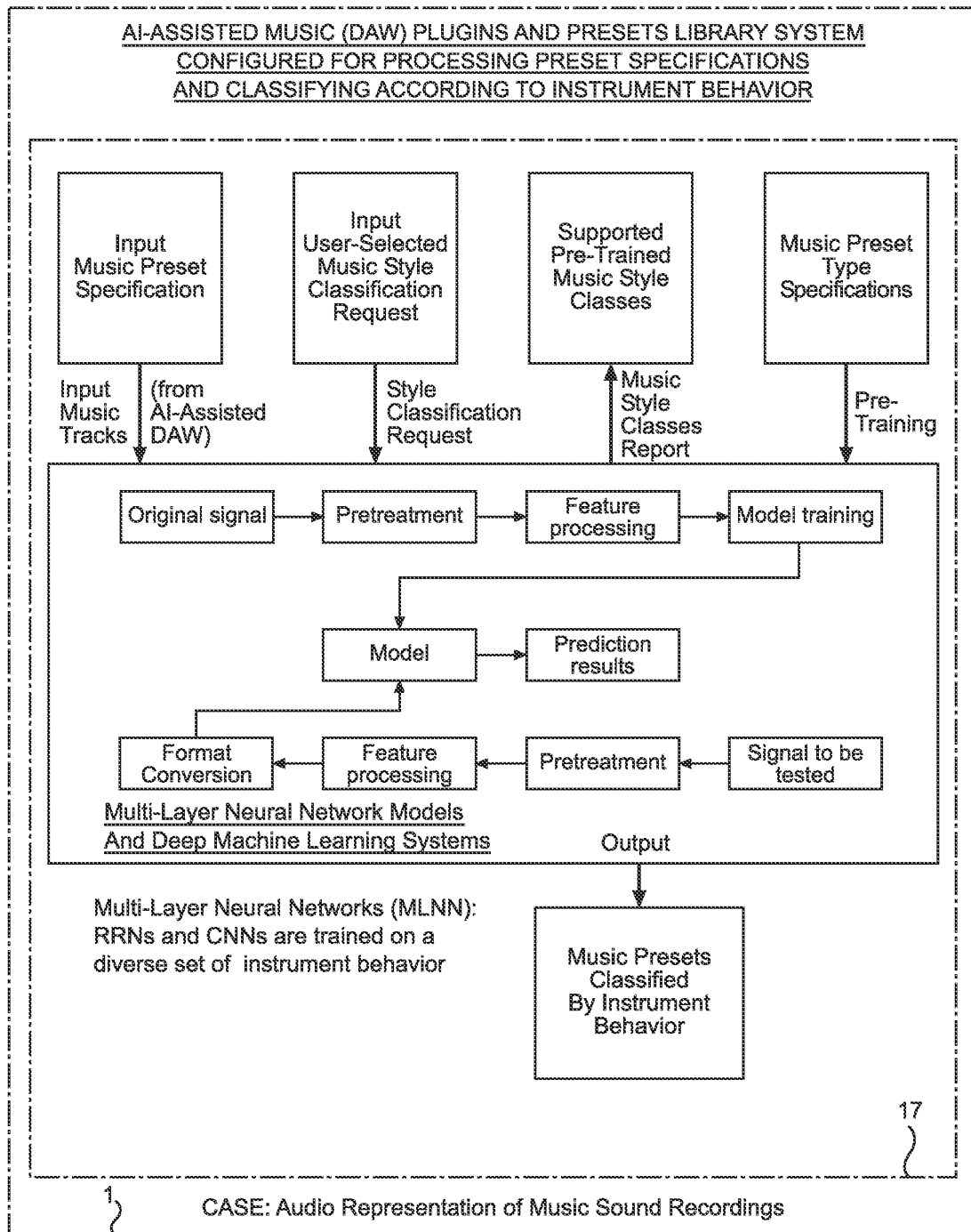


FIG. 31B

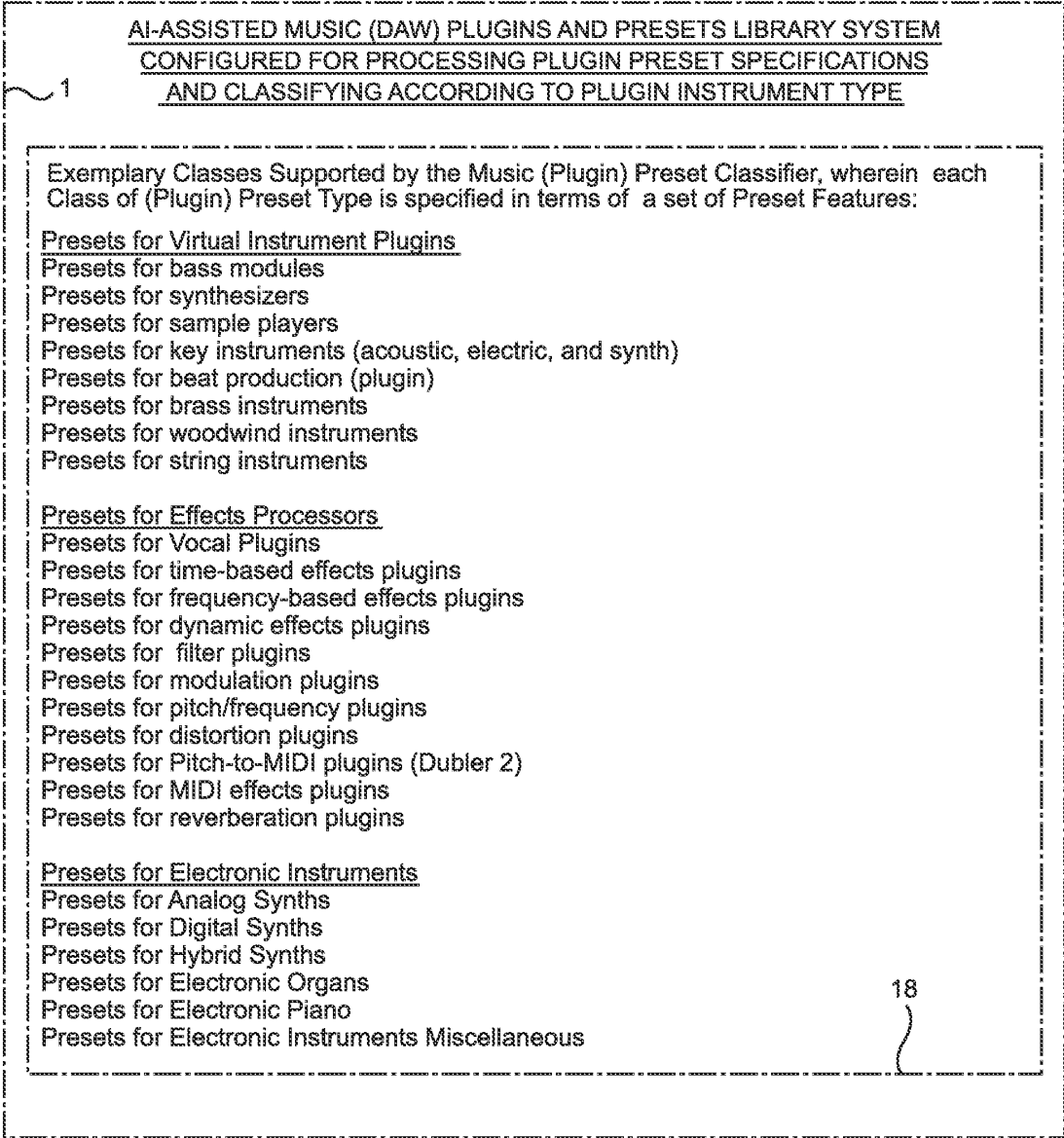


FIG. 31B1

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

19

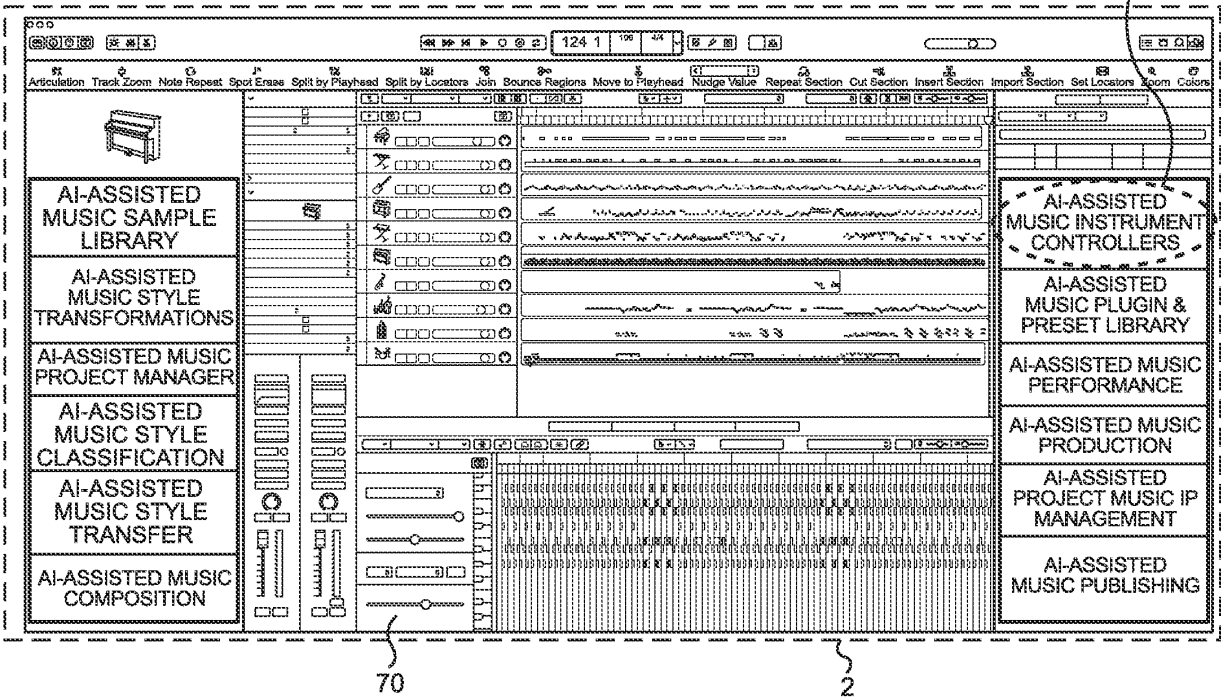


FIG. 32

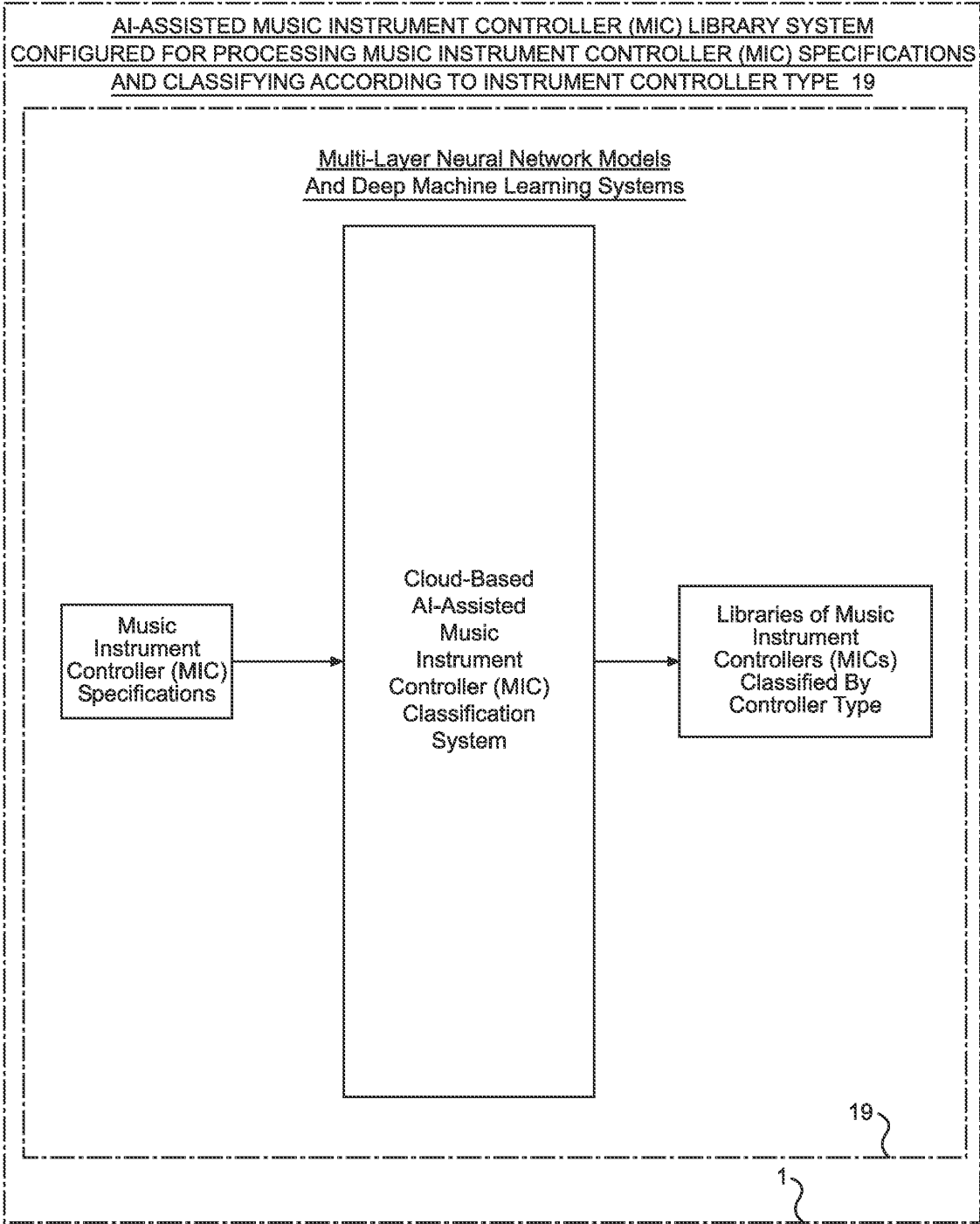


FIG. 33

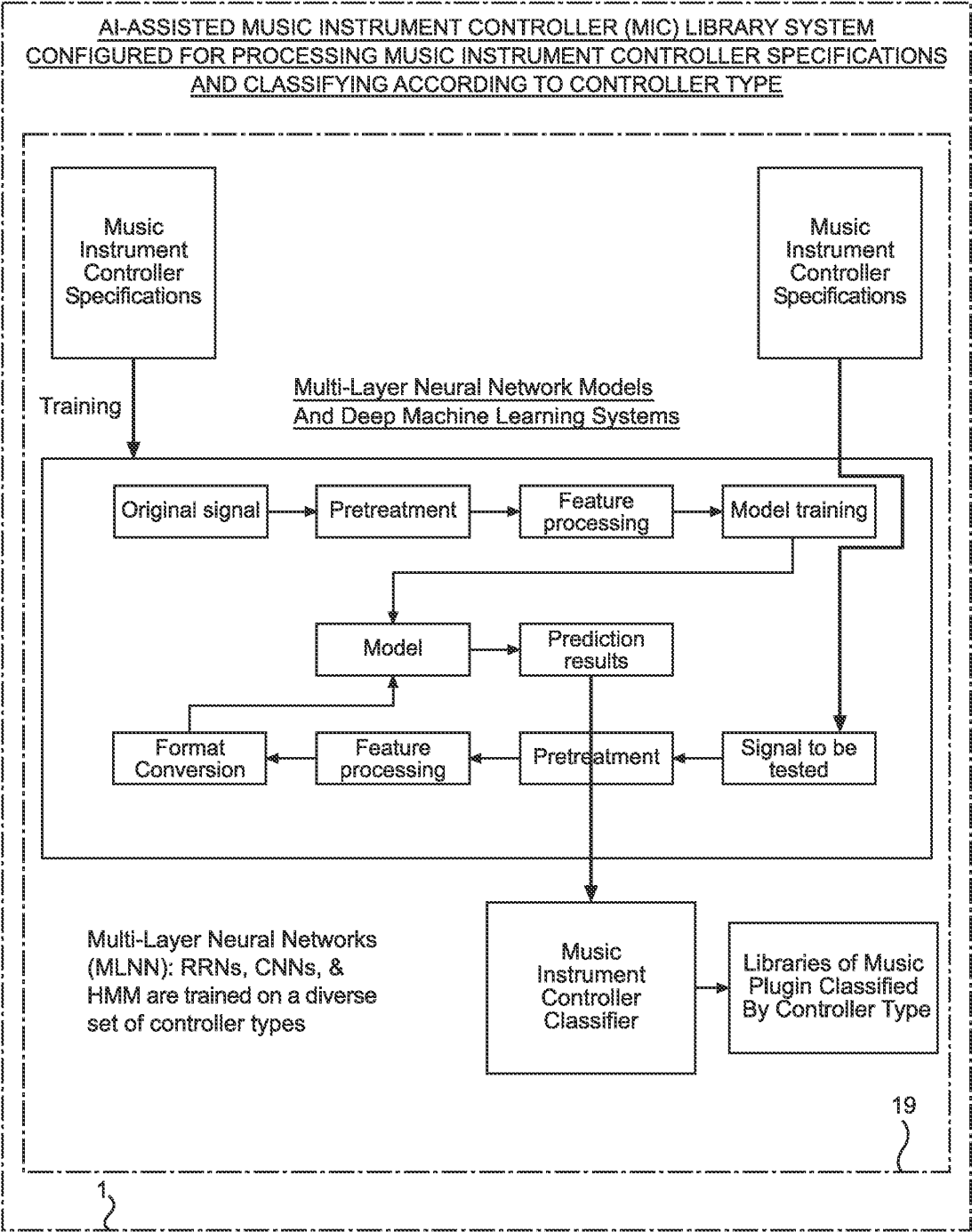


FIG. 33A

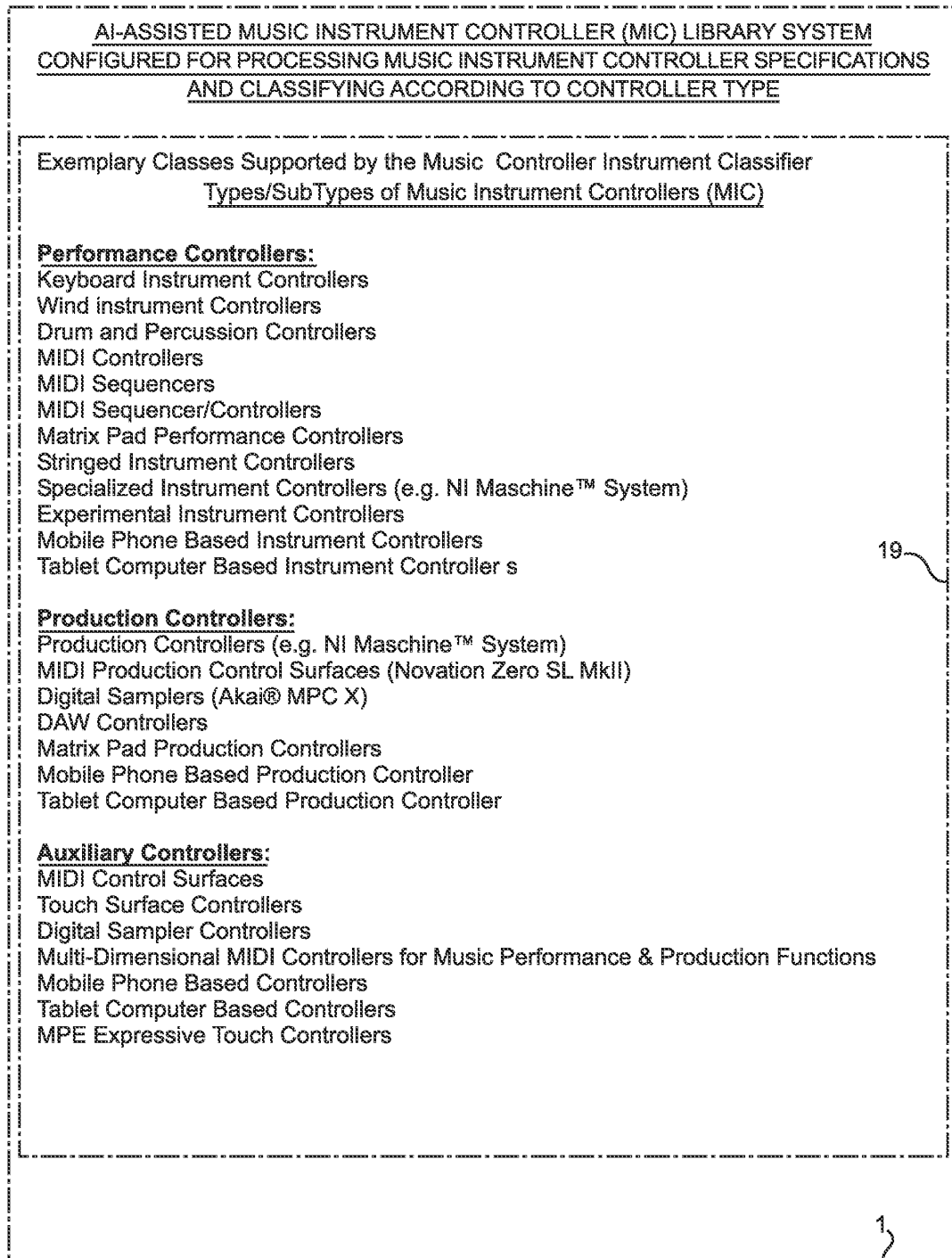


FIG. 33B

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

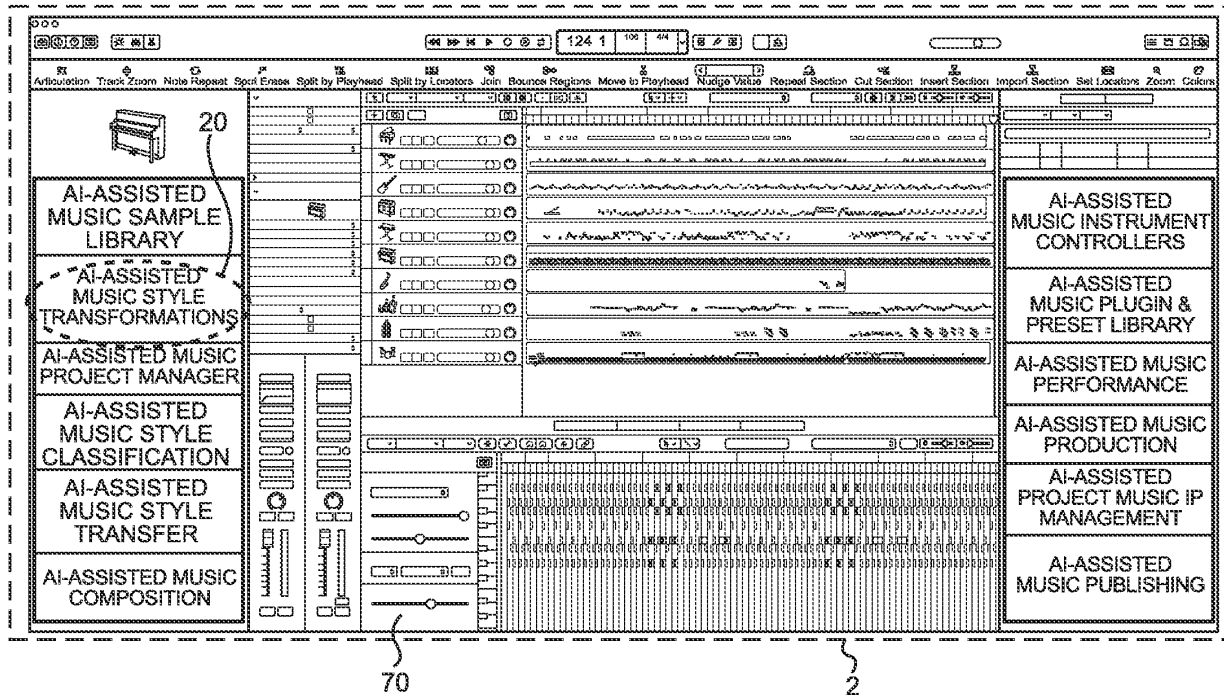


FIG. 34

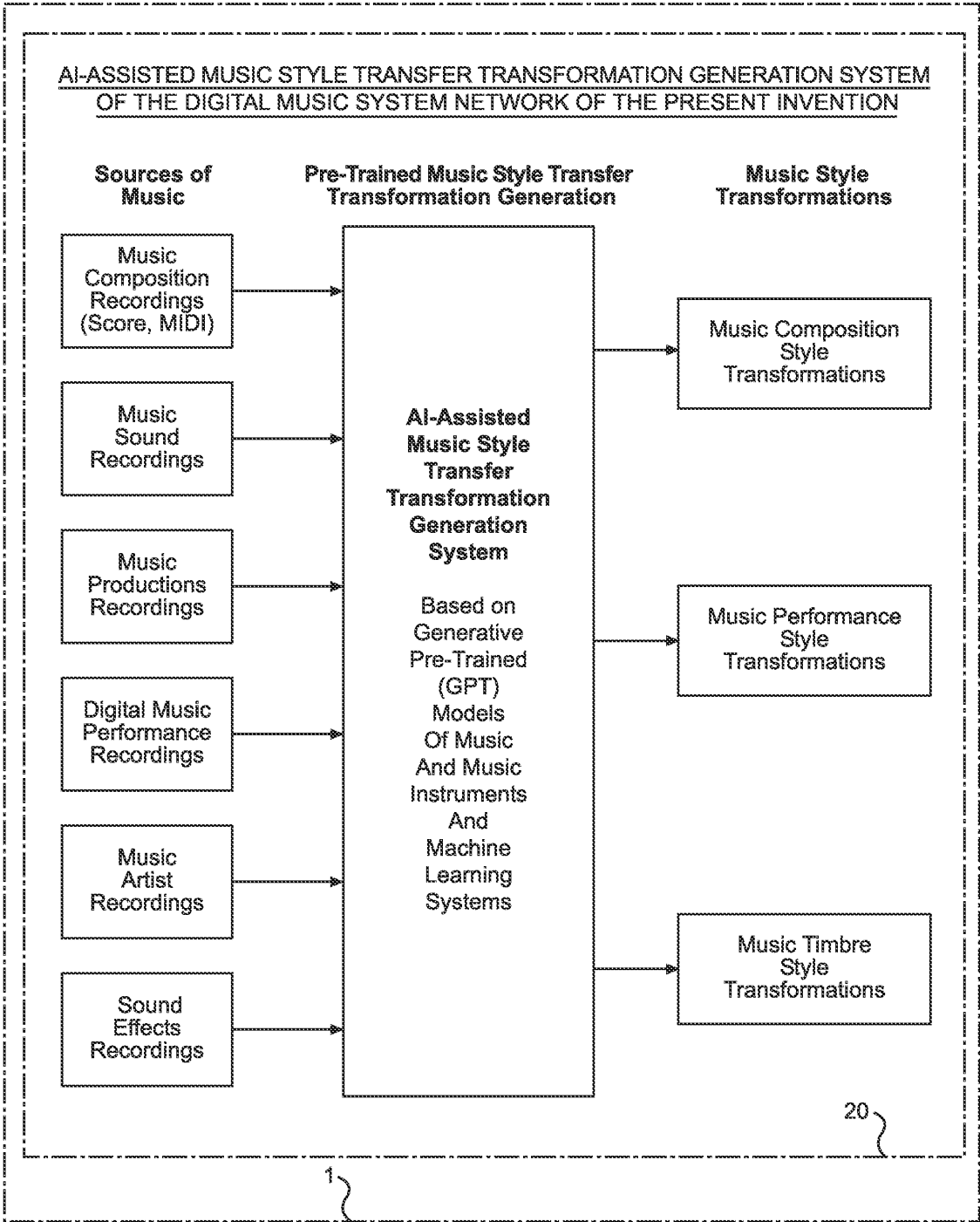


FIG. 35

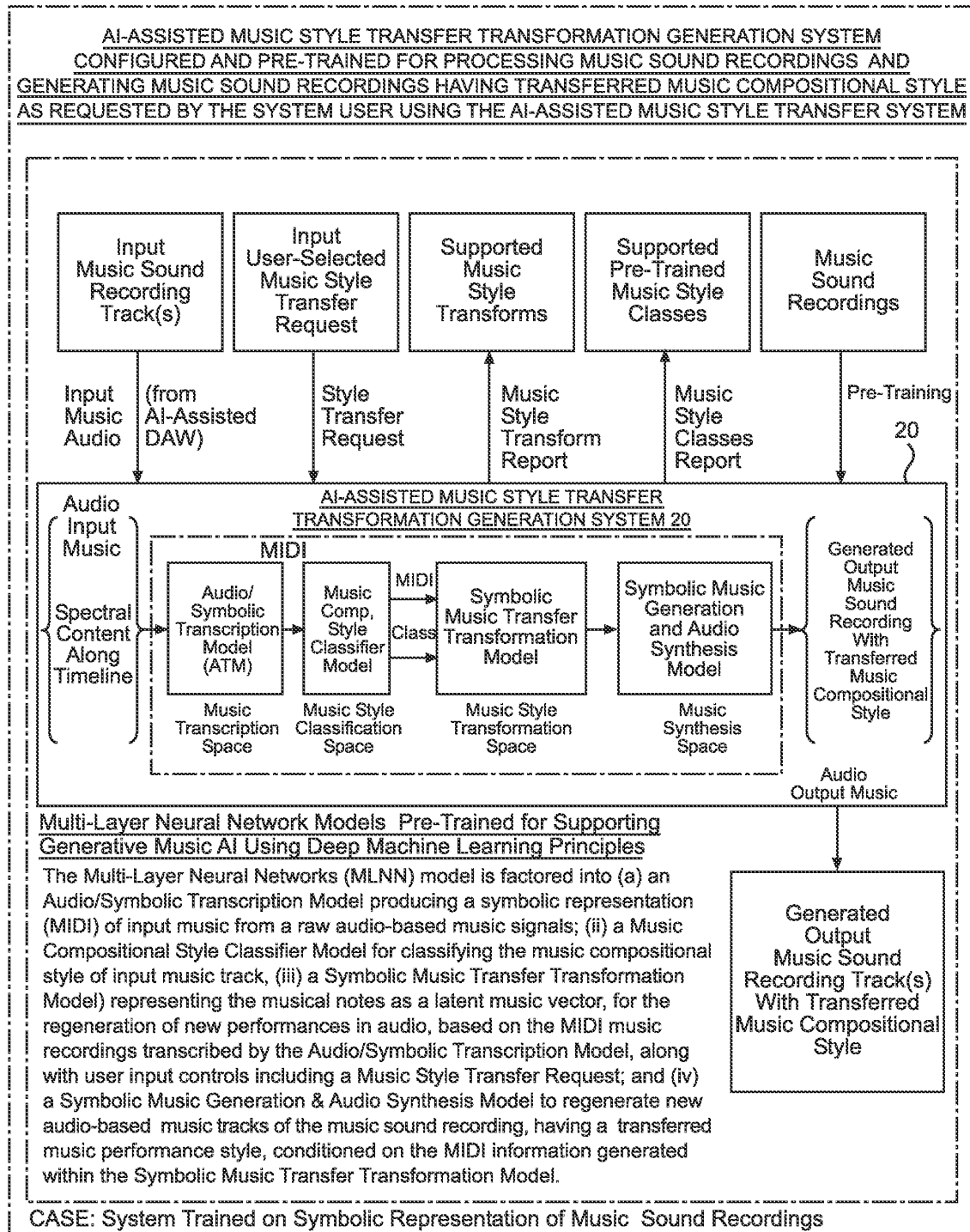


FIG. 35A1

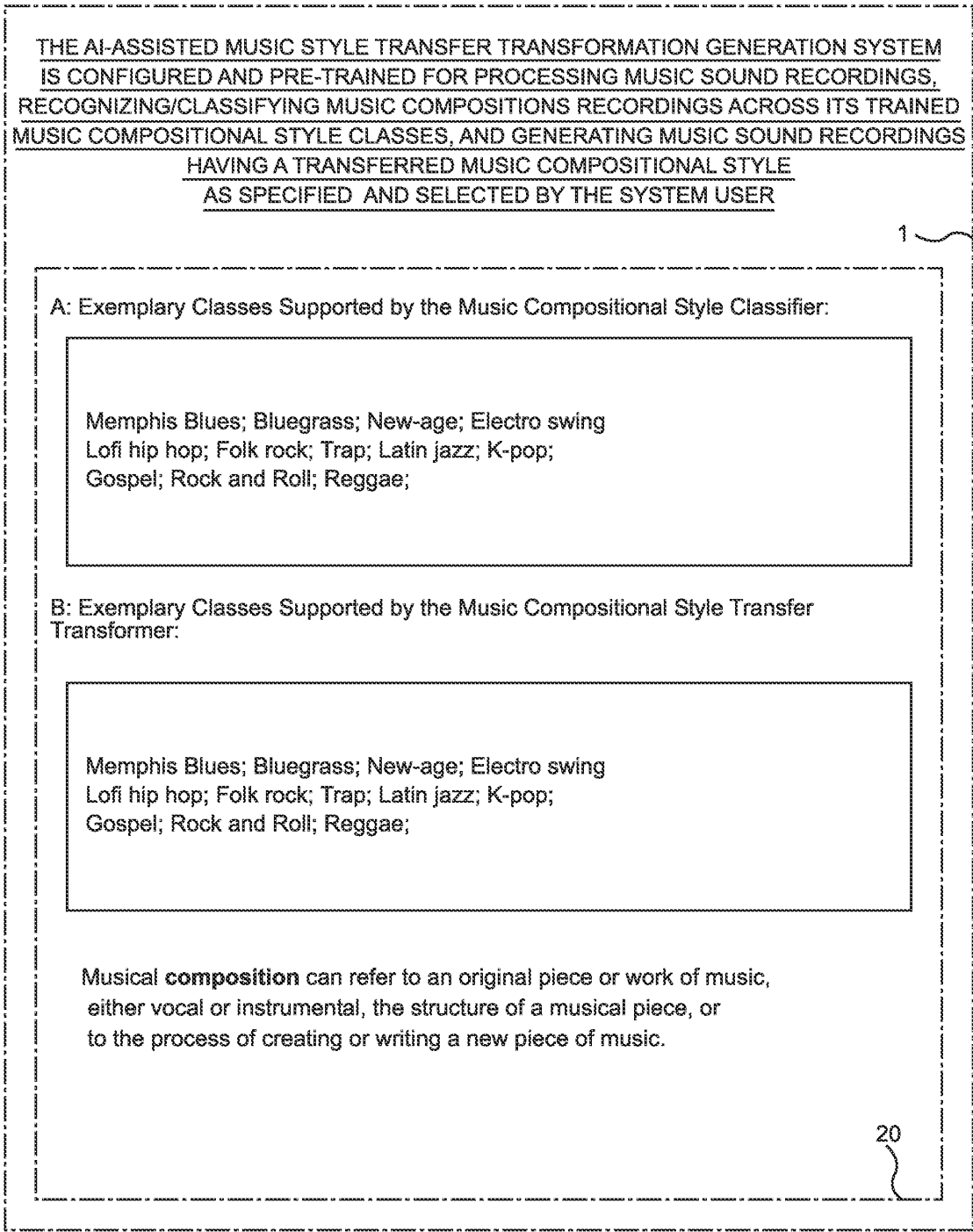


FIG. 35A1A

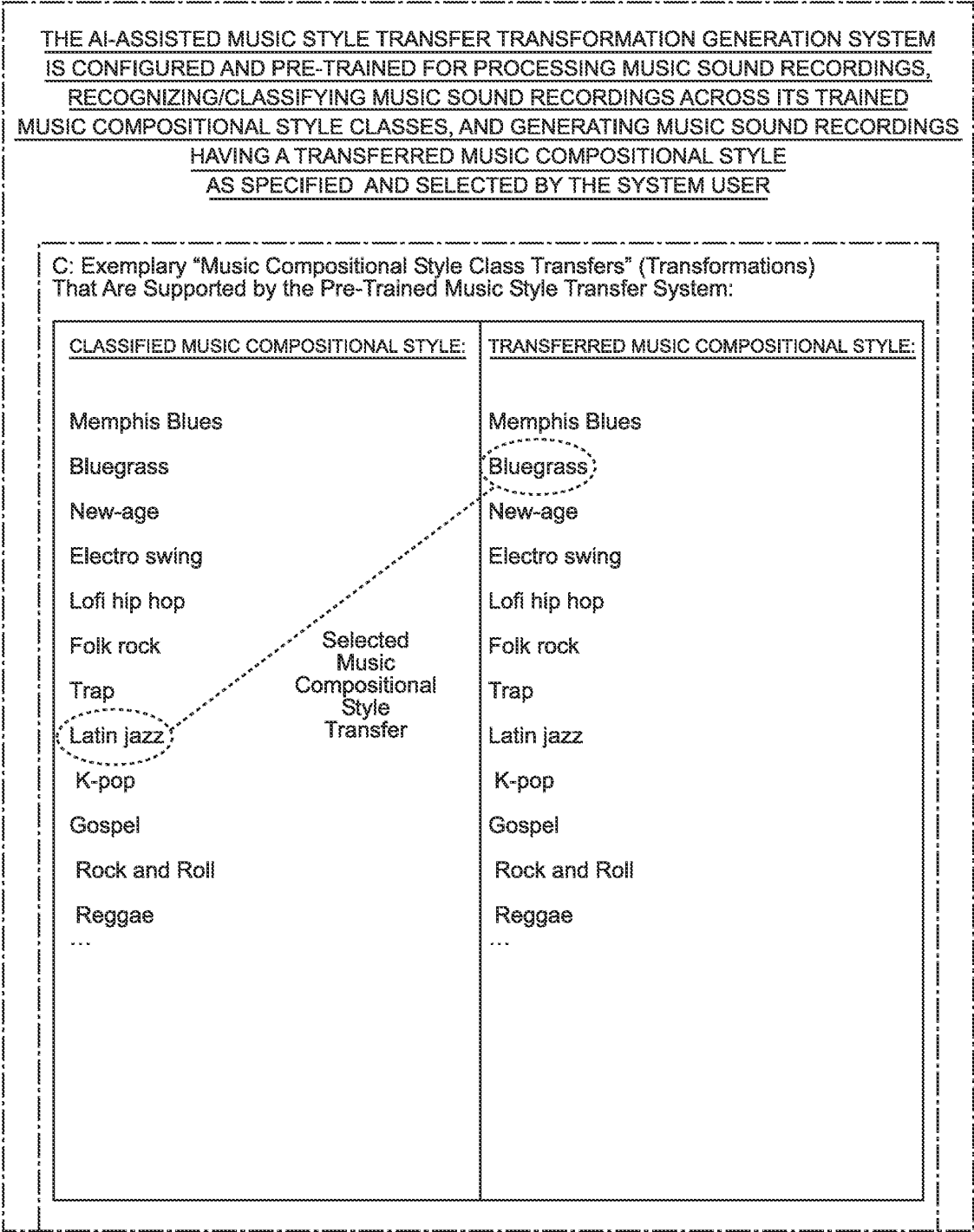


FIG. 35A1B

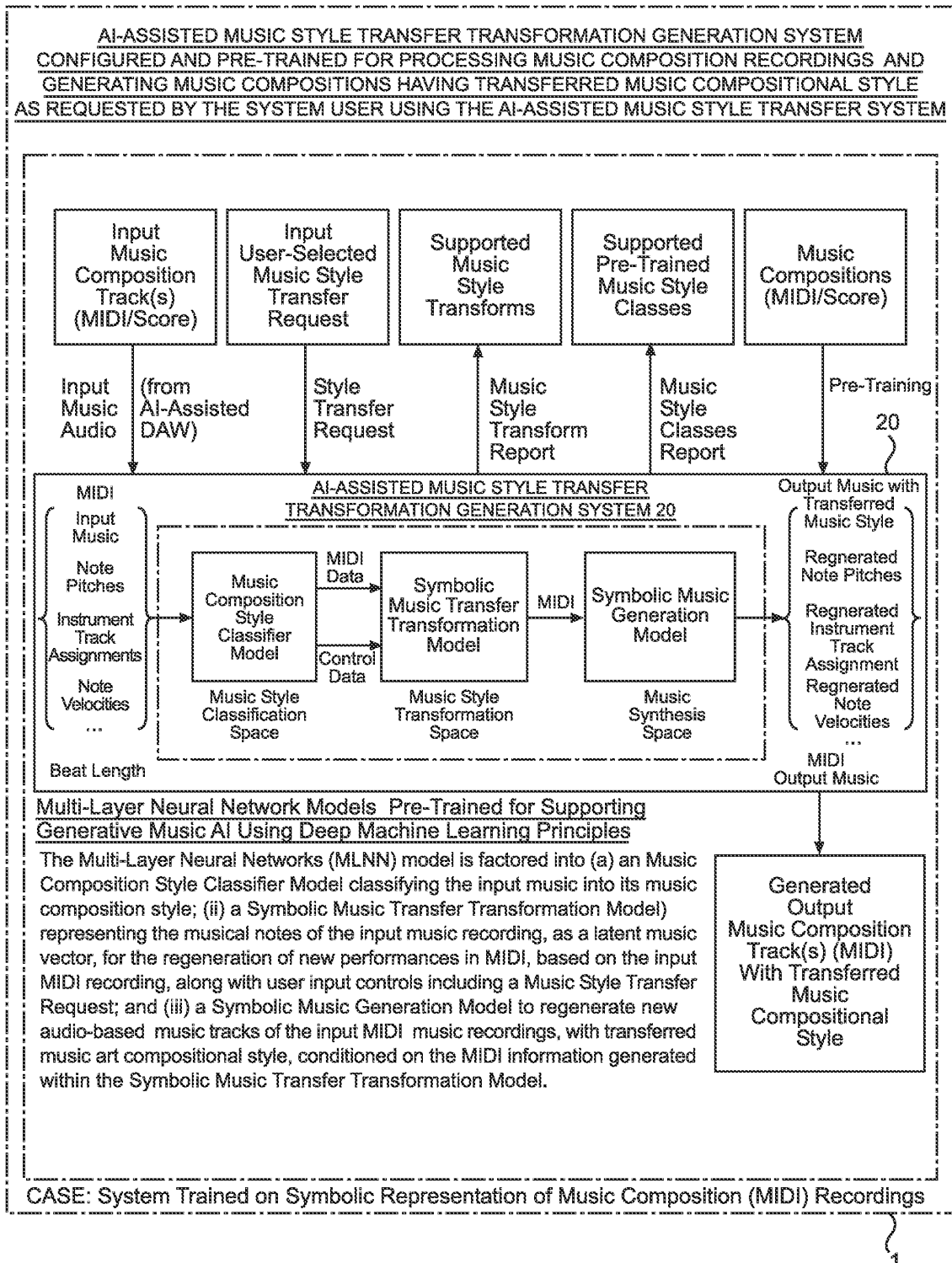


FIG. 35A2

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM IS CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC COMPOSITION RECORDINGS, RECOGNIZING/CLASSIFYING MUSIC COMPOSITION RECORDINGS ACROSS ITS TRAINED MUSIC COMPOSITIONAL STYLE CLASSES, AND GENERATING MUSIC COMPOSITION RECORDINGS HAVING A TRANSFERRED MUSIC COMPOSITION STYLE AS SPECIFIED AND SELECTED BY THE SYSTEM USER

A: Exemplary Classes Supported by the Music Compositional Style Classifier:

Memphis Blues; Bluegrass; New-age; Electro swing
Lofi hip hop; Folk rock; Trap; Latin jazz; K-pop;
Gospel; Rock and Roll; Reggae;

B: Exemplary Classes Supported by the Music Compositional Style Transfer Transformer:

Memphis Blues; Bluegrass; New-age; Electro swing
Lofi hip hop; Folk rock; Trap; Latin jazz; K-pop;
Gospel; Rock and Roll; Reggae;

Musical **Composition** can refer to an original piece or work of music, either vocal or instrumental, the structure of a musical piece, or to the process of creating or writing a new piece of music.

FIG. 35A2A

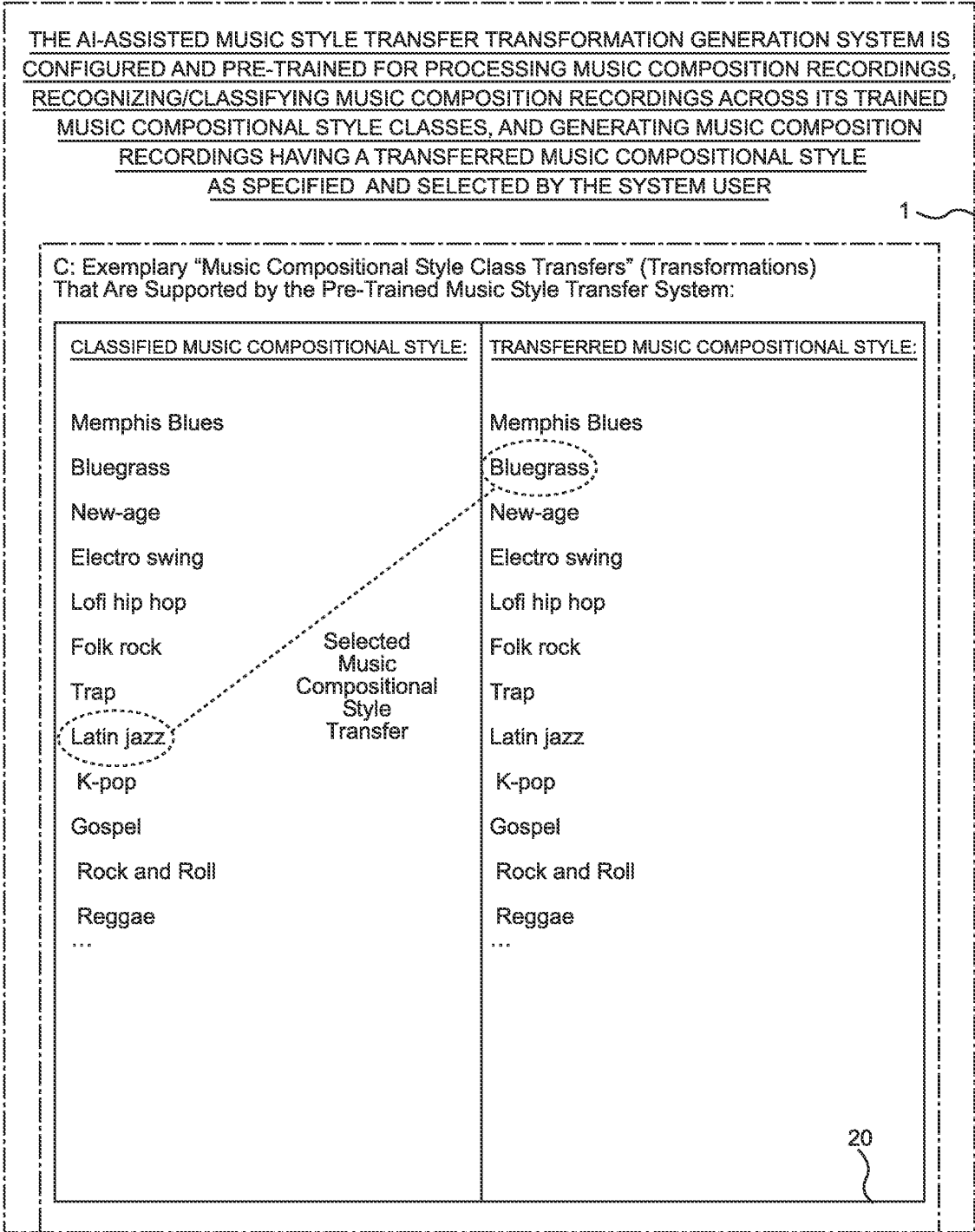


FIG. 35A2B

AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM
CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC SOUND RECORDINGS AND
GENERATING MUSIC SOUND RECORDINGS HAVING TRANSFERRED MUSIC PERFORMANCE STYLE
AS REQUESTED BY THE SYSTEM USER USING THE AI-ASSISTED MUSIC STYLE TRANSFER SYSTEM

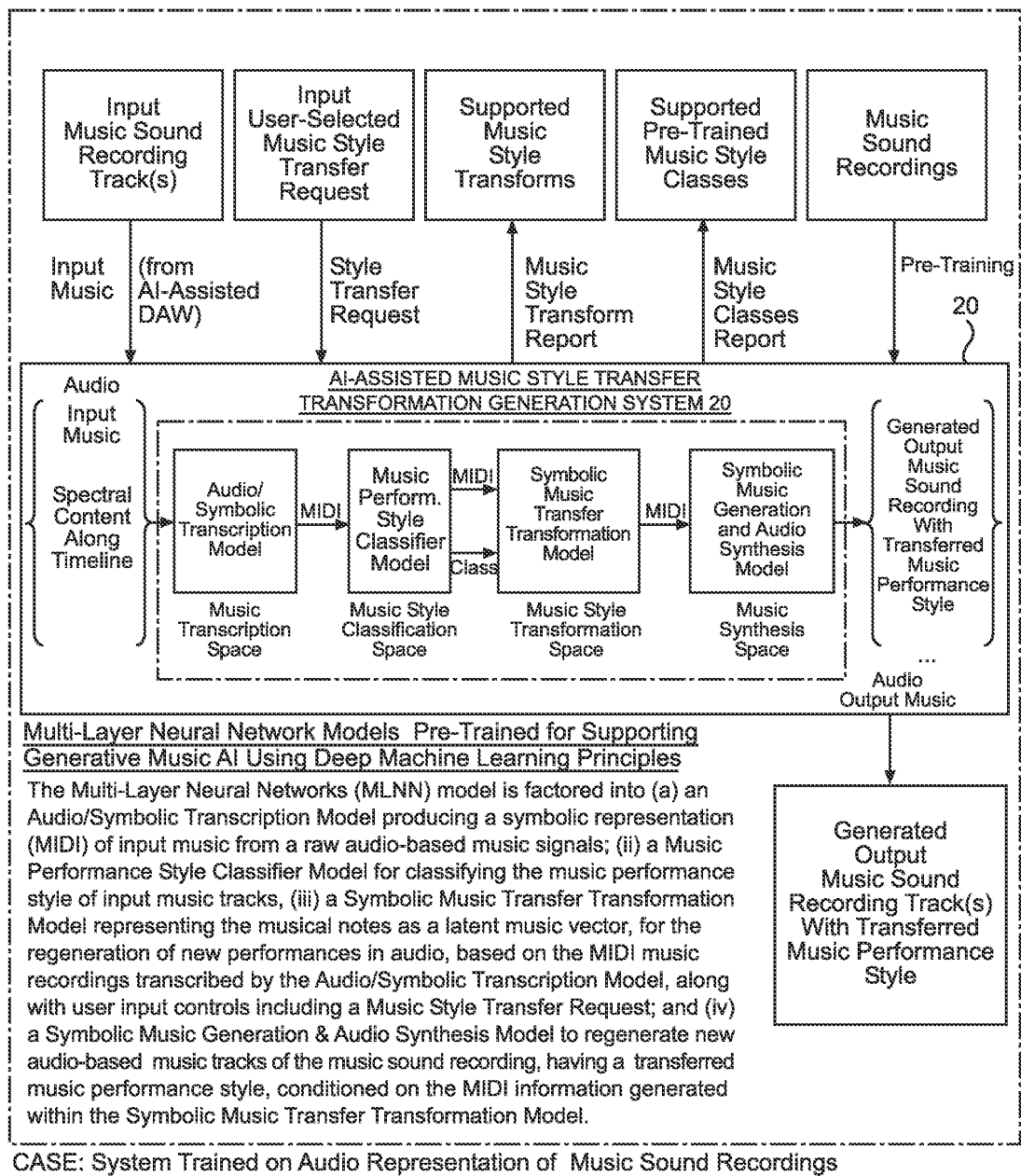


FIG. 35B1

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM
IS CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC SOUND RECORDINGS,
RECOGNIZING/CLASSIFYING MUSIC SOUND RECORDINGS ACROSS ITS TRAINED
MUSIC PERFORMANCE STYLE CLASSES, AND GENERATING MUSIC SOUND RECORDINGS
HAVING A TRANSFERRED MUSIC PERFORMANCE STYLE
AS SPECIFIED AND SELECTED BY THE SYSTEM USER

1 ~

A: Exemplary Classes Supported by the Music Performance Style Classifier:

Vocal – Accompanied; Vocal – Unaccompanied; Vocal – Solo; Vocal – Ensemble; Vocal – Computerized; Vocal – Natural Human; Melisma (vocal run) or Roulade; Syllabic; Instrumental – Solo; Instrumental – Ensemble ; Instrumental – Acoustic; Instrumental – Electronic; Tempo Rubato; Staccato; Legato; Soft/quiet; Forte/Loud; Portamento; Glissando; Vibrato; Tremolo; Arpeggio; Cambiatat

B: Exemplary Classes Supported by the Music Performance Style Transfer Transformer:

Vocal – Accompanied; Vocal – Unaccompanied; Vocal – Solo; Vocal – Ensemble; Vocal – Computerized; Vocal – Natural Human; Melisma (vocal run) or Roulade; Syllabic; Instrumental – Solo; Instrumental – Ensemble ; Instrumental – Acoustic; Instrumental – Electronic; Tempo Rubato; Staccato; Legato; Soft/quiet; Forte/Loud; Portamento; Glissando; Vibrato; Tremolo; Arpeggio; Cambiatat

PERFORMANCE: systematic variations in timing, intensity, intonation, articulation, and timbre.

20 ~

FIG. 35B1A

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM
IS CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC SOUND RECORDINGS,
RECOGNIZING/CLASSIFYING MUSIC SOUND RECORDINGS ACROSS ITS TRAINED
MUSIC PERFORMANCE STYLE CLASSES, AND GENERATING MUSIC SOUND RECORDINGS
HAVING A TRANSFERRED MUSIC PERFORMANCE STYLE
AS SPECIFIED AND SELECTED BY THE SYSTEM USER

1

C: Exemplary "Music Performance Style Class Transfers" (Transformations)
That Are Supported by the Pre-Trained Music Style Transfer System:

CLASSIFIED MUSIC STYLE:	TRANSFERRED MUSIC STYLE:
Vocal – Accompanied; Vocal – Unaccompanied; Vocal – Solo; Vocal – Ensemble; Vocal – Computerized; Vocal – Natural Human; Melisma (vocal run) or Roulade; Syllabic;	Vocal – Accompanied; Vocal – Unaccompanied; Vocal – Solo; Vocal – Ensemble; Vocal – Computerized; Vocal – Natural Human; Melisma (vocal run) or Roulade; Syllabic;
Instrumental – Solo; Instrumental – Ensemble; Instrumental – Acoustic; Instrumental – Electronic;	Instrumental – Solo; Instrumental – Ensemble; Instrumental – Acoustic; Instrumental – Electronic;
Tempo Rubato; Staccato; Legato; Soft/quiet; Forte/Loud; Portamento; Glissando; Vibrato; Tremolo; Arpeggio; Cambiata	Tempo Rubato; Staccato; Legato; Soft/quiet; Forte/Loud; Portamento; Glissando; Vibrato; Tremolo; Arpeggio; Cambiata

Selected
Music
Compositional
Style
Transfer

20

FIG. 35B1B

AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC PRODUCTION (MIDI) RECORDINGS AND GENERATING MUSIC PRODUCTIONS (MIDI) HAVING TRANSFERRED MUSIC PERFORMANCE STYLE AS REQUESTED BY THE SYSTEM USER USING THE AI-ASSISTED MUSIC STYLE TRANSFER SYSTEM

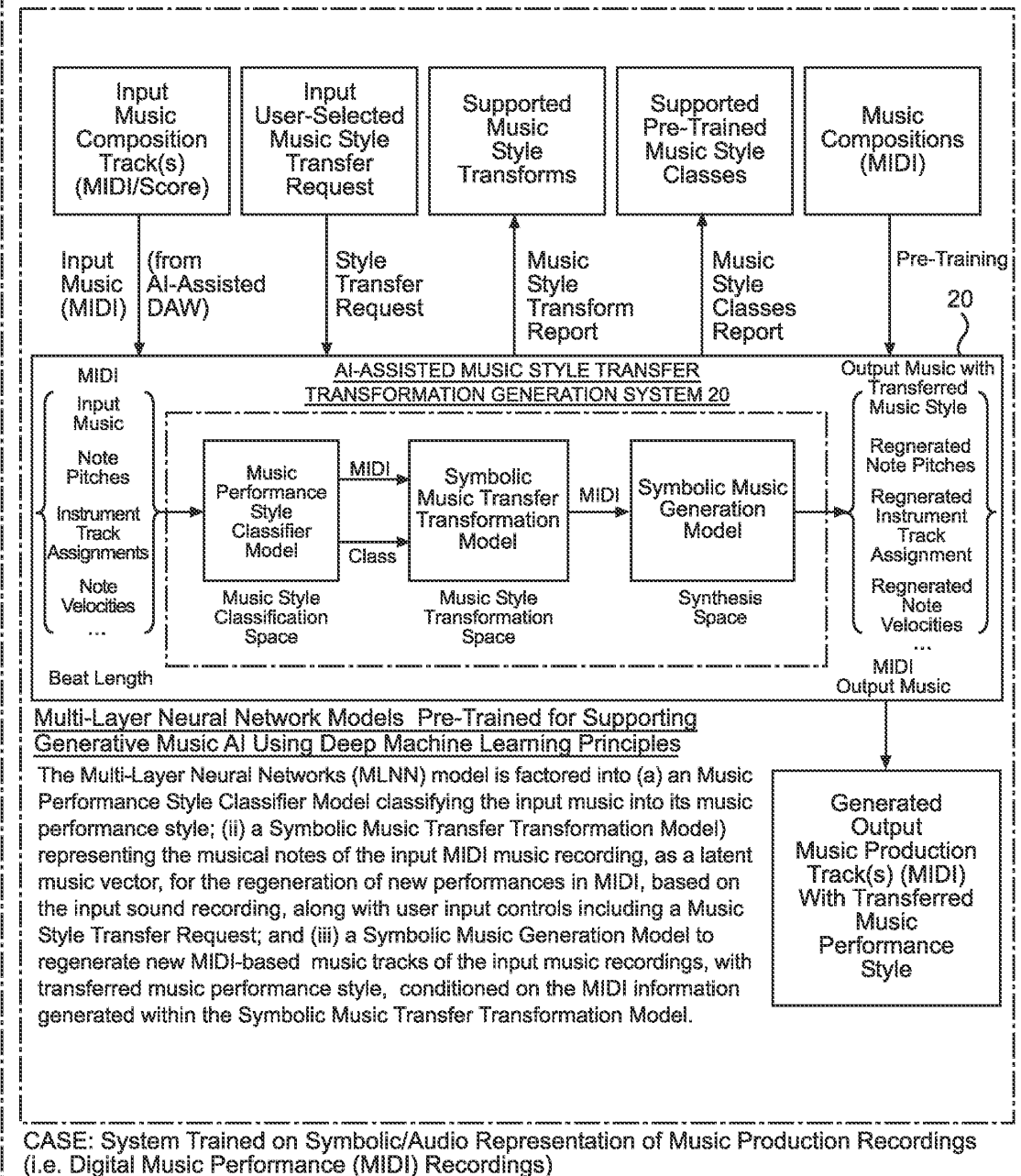


FIG. 35B2

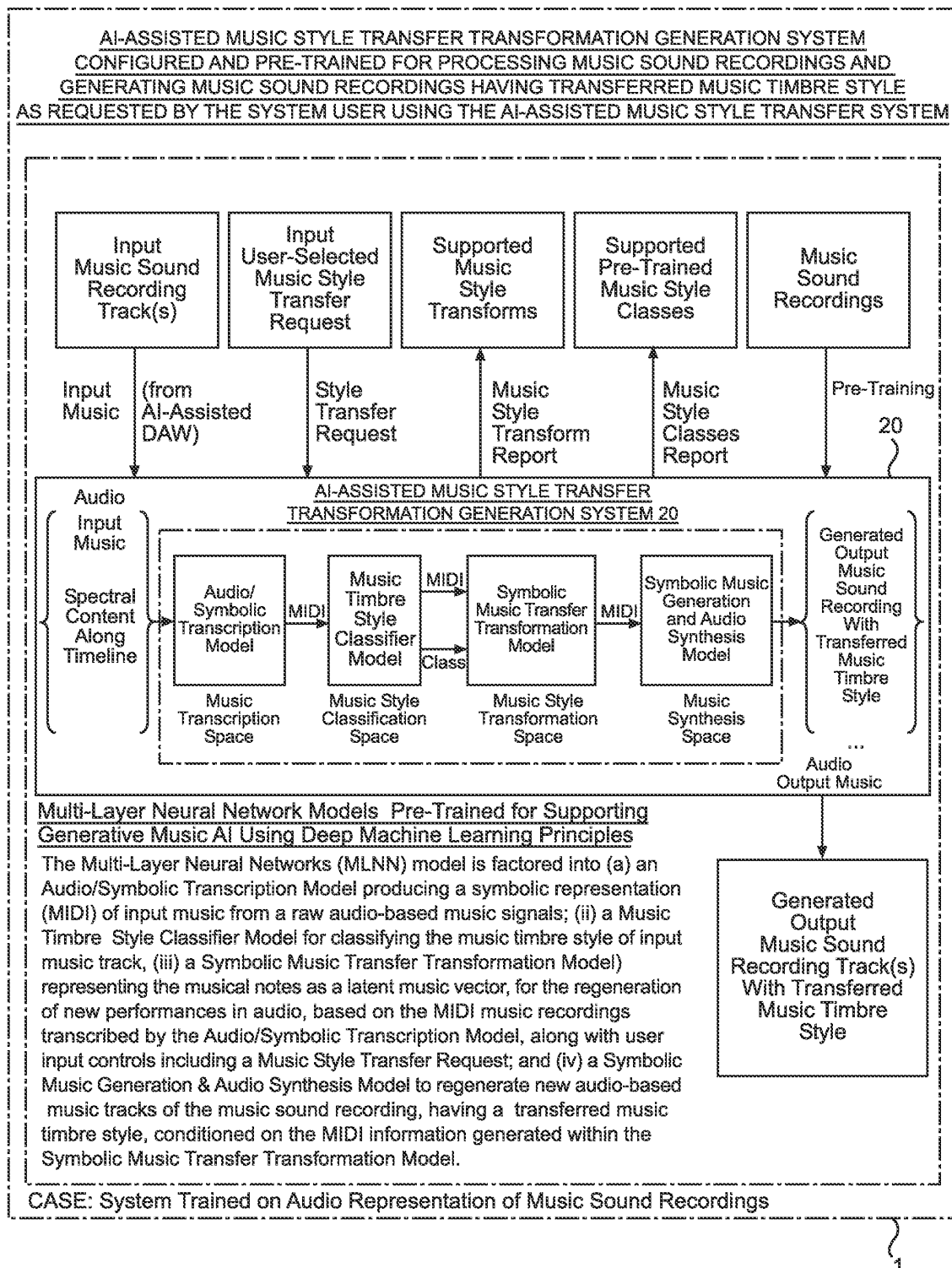


FIG. 35C1

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM
CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC PRODUCTION (MIDI) RECORDINGS,
RECOGNIZING/CLASSIFYING MUSIC PRODUCTION (MIDI) RECORDINGS ACROSS ITS TRAINED
MUSIC STYLE CLASSES, AND GENERATING MUSIC PRODUCTION (MIDI) RECORDINGS
HAVING A TRANSFERRED MUSIC TIMBRE STYLE
AS SPECIFIED AND SELECTED BY THE SYSTEM USER

1

A: Exemplary Classes Supported by the Music Timbre Style Classifier:

Harsh, Distorted; Soft, Dark, Warm; Pure Tone; Reedy; Brassy; Bright;
Dull; Tight, Nasal; Big Bottom; Bright; Growly; Vintage; Thick, Nasal;
Open, Clear; Soft, Breathly; Big, Powerful; Buzzy; Smooth, Sweet; Sharp;
Mellow; Jangle; Vox; Electro-Acoustic (Rhodes); StratoCastor (Fender);
TeleCaster (Fender); Rickenbacker (12 string); Taylor Swift; Michael
Jackson; John Lennon; Elvis Presley; David Bowie; Adele

B: Exemplary Classes Supported by the Music Timbre Style Transfer
Transformer:

Harsh, Distorted; Soft, Dark, Warm; Pure Tone; Reedy; Brassy; Bright;
Dull; Tight, Nasal; Big Bottom; Bright; Growly; Vintage; Thick, Nasal;
Open, Clear; Soft, Breathly; Big, Powerful; Buzzy; Smooth, Sweet; Sharp;
Mellow; Jangle; Vox; Electro-Acoustic (Rhodes); StratoCastor (Fender);
TeleCaster (Fender); Rickenbacker (12 string); Taylor Swift; Michael
Jackson; John Lennon; Elvis Presley; David Bowie; Adele

Timbre can be defined as describing the tone-colour or tone quality of a sound. It is how we identify the difference between the quality of tone of one instrument/voice from another. For example, if a flute and an oboe are playing the same note, **the pitch may be the same, but the timbre of each of the sounds is very different.** As a result, the listener can easily hear that the note is being played by 2 different instruments.

20

FIG. 35C1A

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM
CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC PRODUCTION (MIDI) RECORDINGS,
RECOGNIZING/CLASSIFYING MUSIC PRODUCTION (MIDI) RECORDINGS ACROSS ITS TRAINED
MUSIC TIMBRE STYLE CLASSES, AND GENERATING MUSIC PRODUCTION (MIDI) RECORDINGS
HAVING A TRANSFERRED MUSIC TIMBRE STYLE
AS SPECIFIED AND SELECTED BY THE SYSTEM USER

C: Exemplary "Music Timbre Style Class Transfers" (Transformations) That
Are Supported by the Pre-Trained Music Style Transfer System:

CLASSIFIED MUSIC TIMBRE STYLE:	TRANSFERRED MUSIC TIMBRE STYLE:
Harsh, Distorted	Harsh, Distorted
Soft, Dark, Warm	Soft, Dark, Warm
Pure Tone	Pure Tone
Reedy	Reedy
Brassy	Brassy
Bright	Bright
Dull	Dull
Thick, Phatt	Thick, Phatt
Big bottom	Big bottom
Bright	Bright
Growly	Growly
Vintage	Vintage
Tight, Nasal	Tight, Nasal
Open, Clear	Open, Clear
Soft, Breathly	Soft, Breathly
Big, Powerful	Big, Powerful
Buzzy	Buzzy
Smooth, Sweet	Smooth, Sweet
Sharp	Sharp
Mellow	Mellow
Jangle	Jangle
Vox	Vox
Electro-Acoustic (Rhodes)	Electro-Acoustic (Rhodes)
StratoCaster (Fender)	StratoCaster (Fender)
TeleCaster (Fender)	TeleCaster (Fender)
Rickenbacker (12 string)	Rickenbacker (12 string)
Taylor Swift	Taylor Swift
Michael Jackson	Michael Jackson
John Lennon	John Lennon
Elvis Presley	Elvis Presley
David Bowie	David Bowie
Adele	Adele

FIG. 35C1B

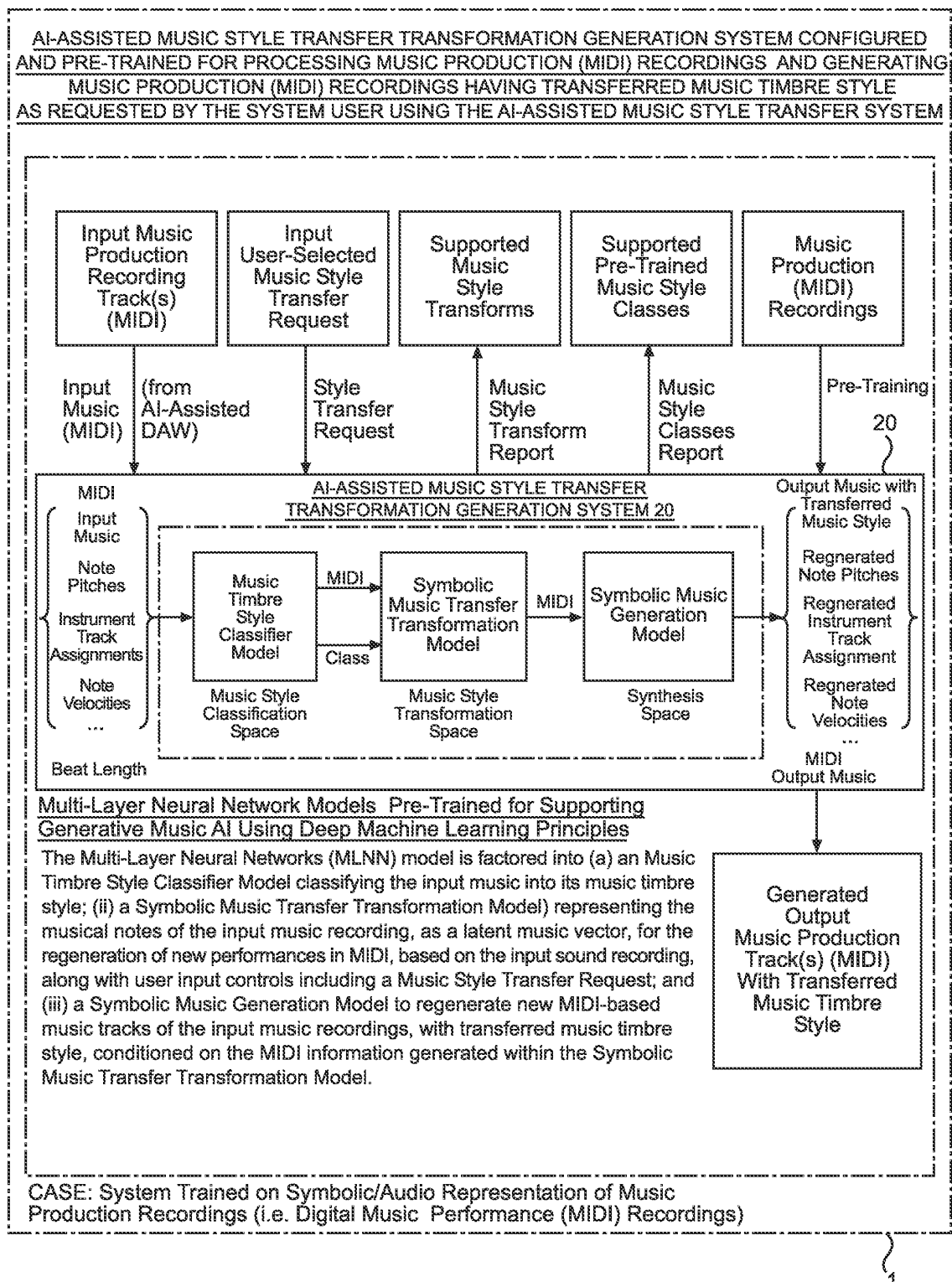


FIG. 35C2

AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC ARTIST SOUND RECORDINGS AND GENERATING MUSIC ARTIST SOUND RECORDINGS HAVING TRANSFERRED MUSIC ARTIST STYLE AS REQUESTED BY THE SYSTEM USER USING THE AI-ASSISTED MUSIC STYLE TRANSFER SYSTEM

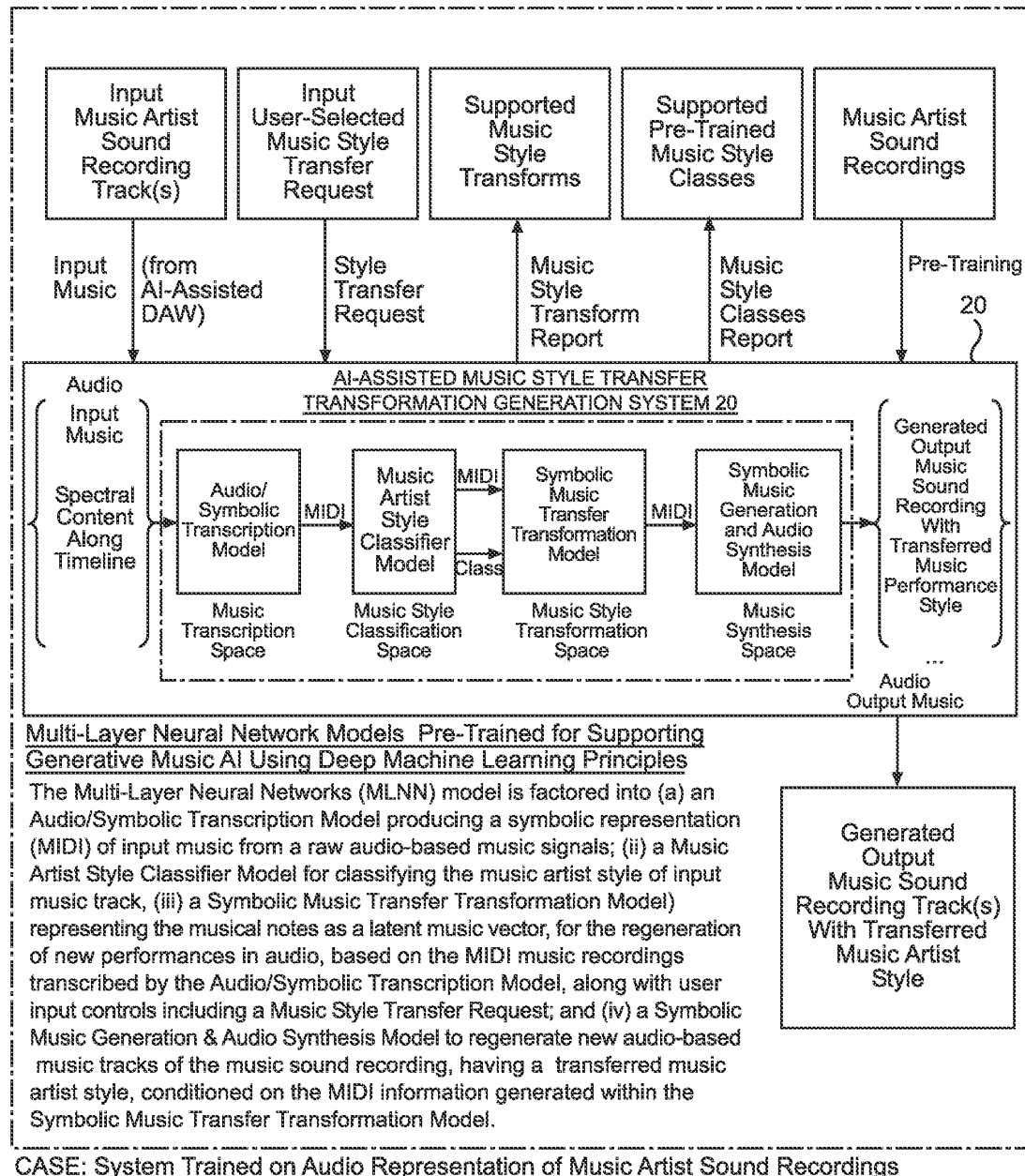


FIG. 35D1

AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC PRODUCTION (MIDI) RECORDINGS AND GENERATING MUSIC PRODUCTIONS (MIDI) HAVING TRANSFERRED MUSIC ARTIST STYLE AS REQUESTED BY THE SYSTEM USER USING THE AI-ASSISTED MUSIC STYLE TRANSFER SYSTEM

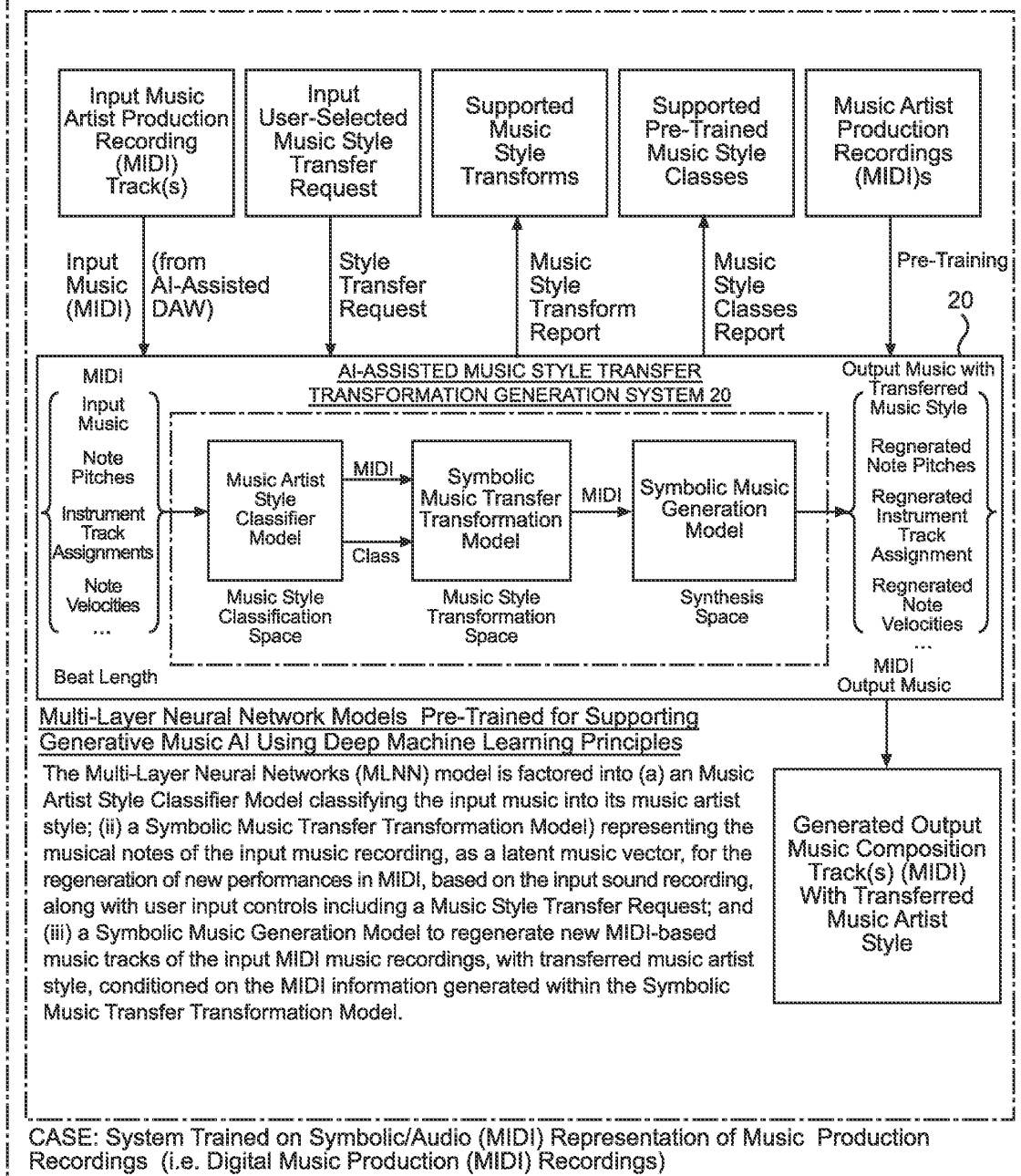


FIG. 35D2

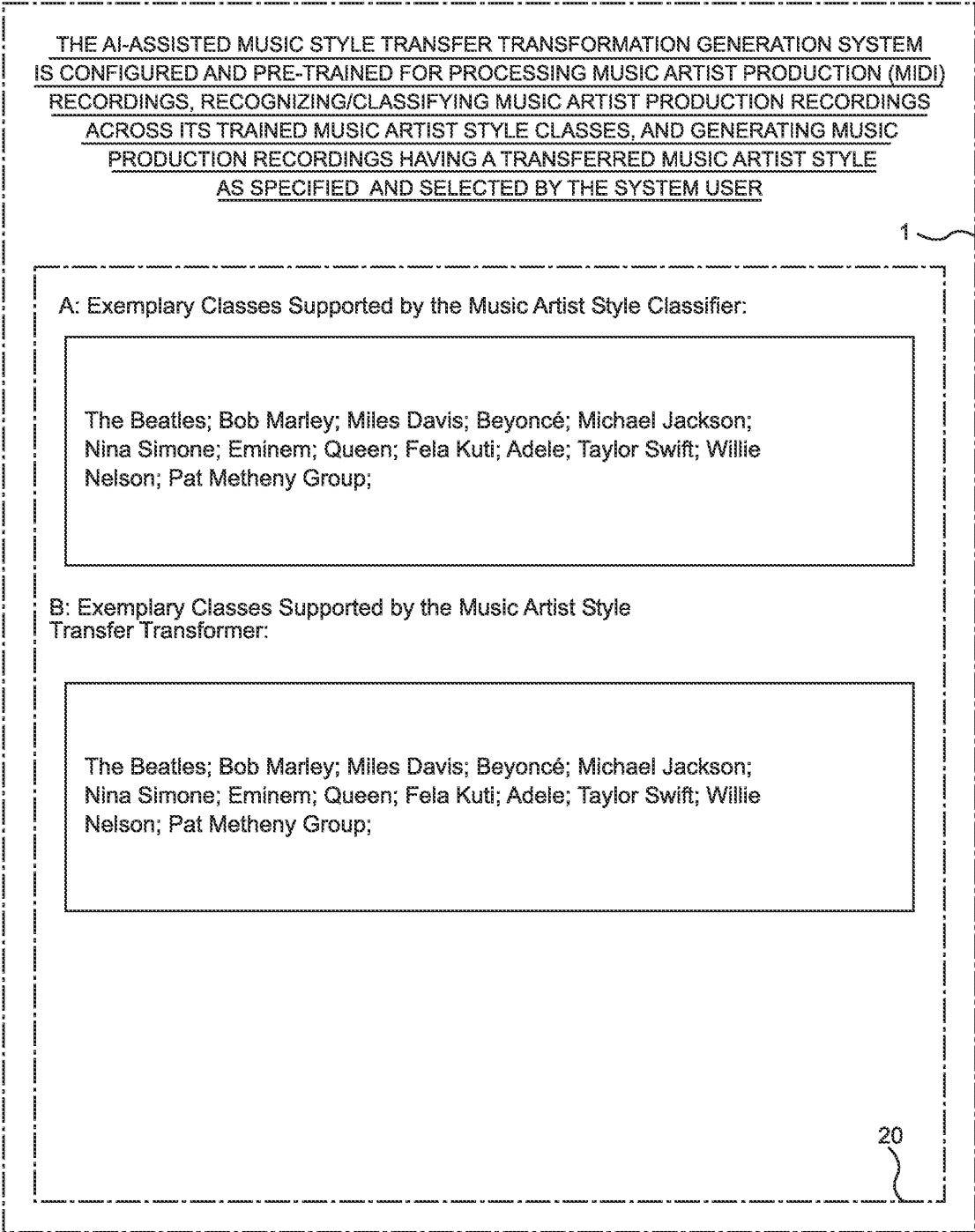


FIG. 35D2A

THE AI-ASSISTED MUSIC STYLE TRANSFER TRANSFORMATION GENERATION SYSTEM IS CONFIGURED AND PRE-TRAINED FOR PROCESSING MUSIC PRODUCTION (MIDI) RECORDINGS, RECOGNIZING/CLASSIFYING MUSIC PRODUCTION RECORDINGS ACROSS ITS TRAINED MUSIC ARTIST STYLE CLASSES, AND GENERATING MUSIC PRODUCTION RECORDINGS HAVING A TRANSFERRED MUSIC ARTIST STYLE AS SPECIFIED AND SELECTED BY THE SYSTEM USER

1

C: Exemplary "Music Artist Style Class Transfers" (Transformations) That Are Supported by the Pre-Trained Music Style Transfer System:

CLASSIFIED MUSIC ARTIST STYLE:	TRANSFERRED MUSIC ARTTIST STYLE:
The Beatles	The Beatles
Bob Marley	Bob Marley
Miles Davis	Miles Davis
Beyoncé	Beyoncé
Michael Jackson	Michael Jackson
Nina Simone	Nina Simone
Eminem	Eminem
Queen	Queen
Fela Kuti	Fela Kuti
Adele	Adele
Taylor Swift	Taylor Swift
Willie Nelson	Willie Nelson
Pat Metheny Group	Pat Metheny Group

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FIG. 35D2B

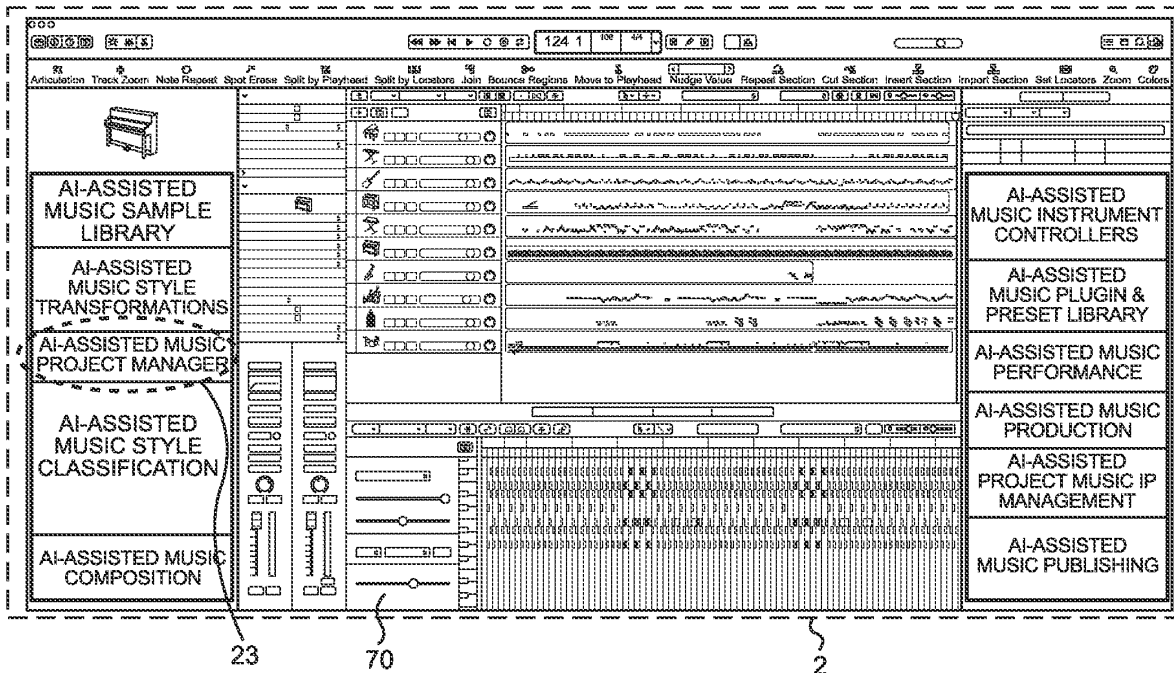


FIG. 36

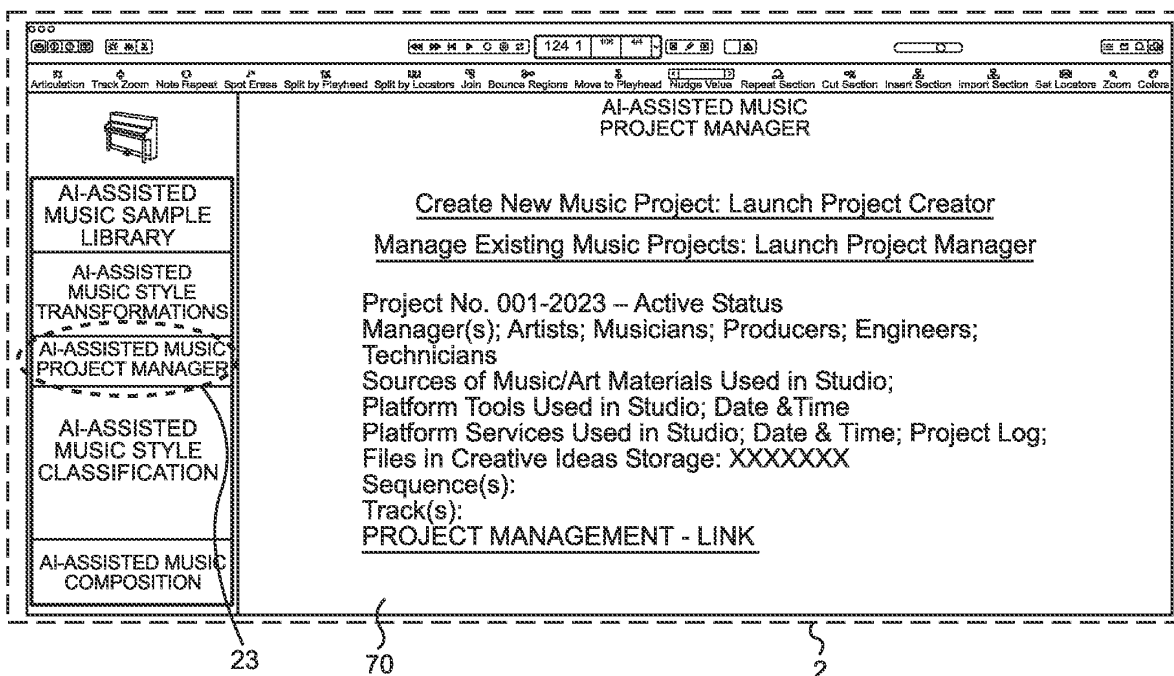


FIG. 37

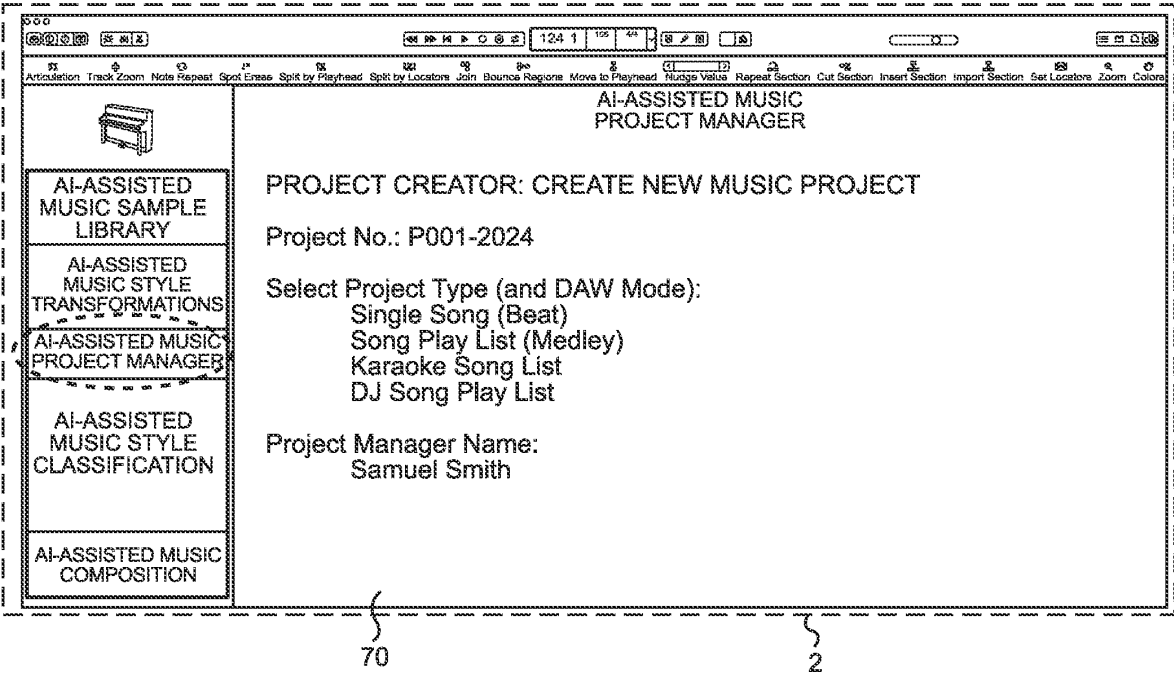


FIG. 37A

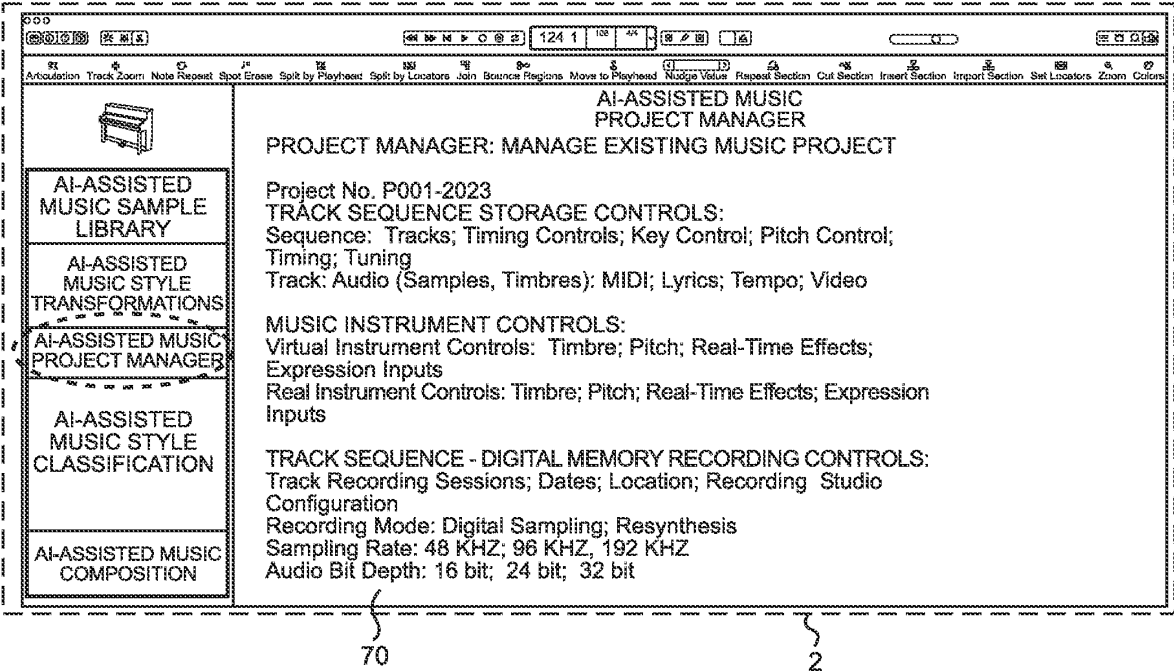


FIG. 37B

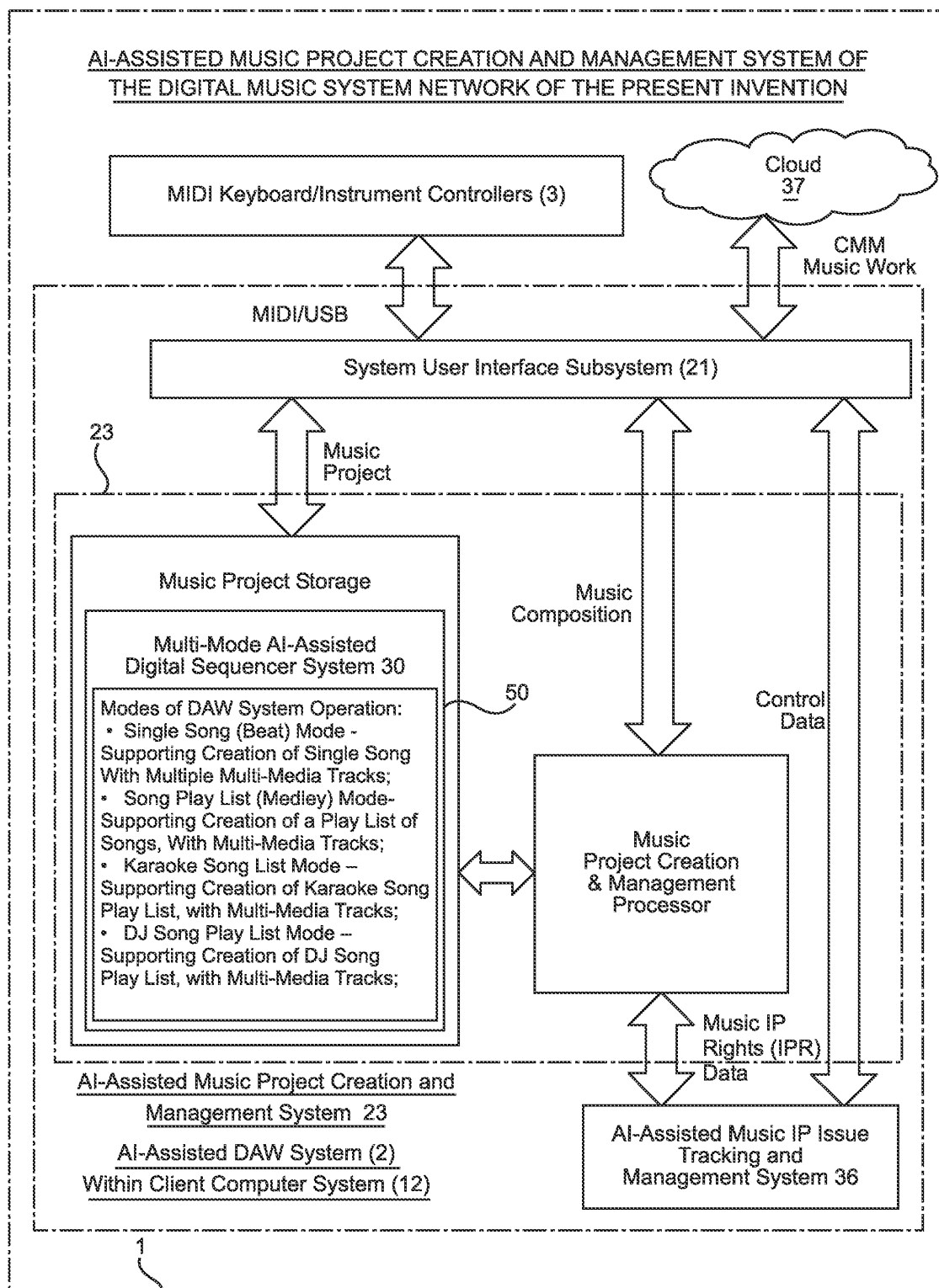


FIG. 38

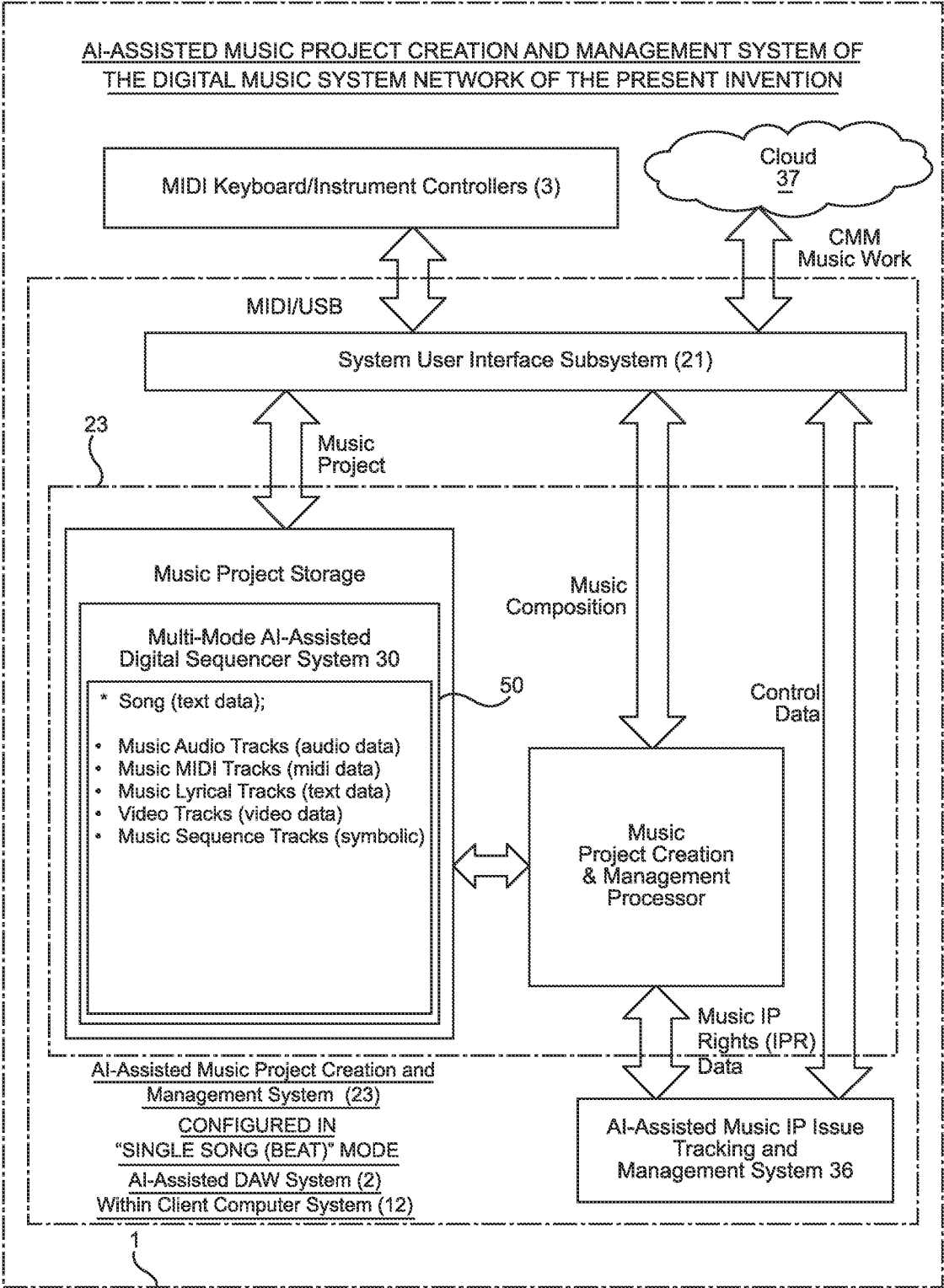


FIG. 38A

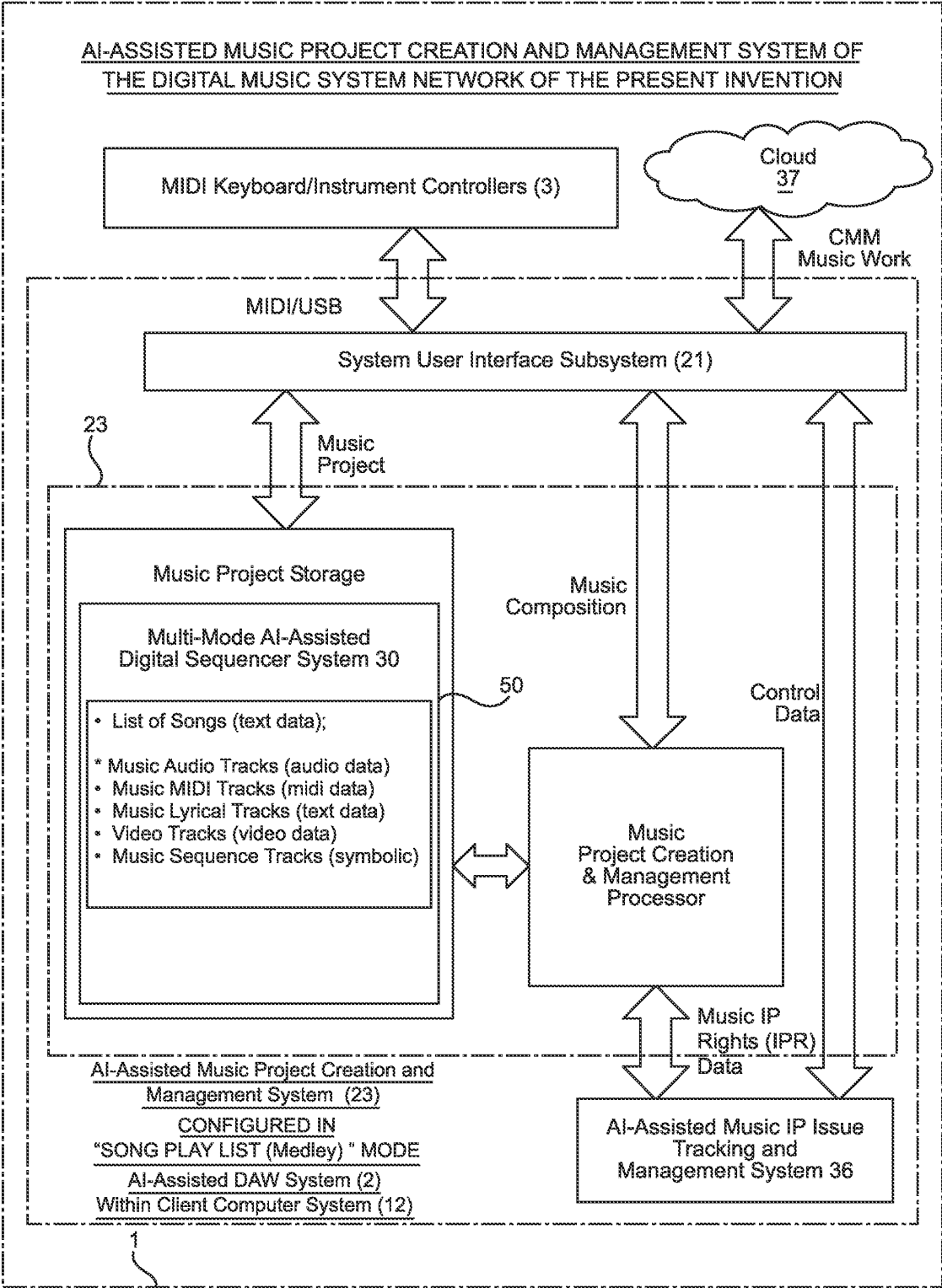


FIG. 38B

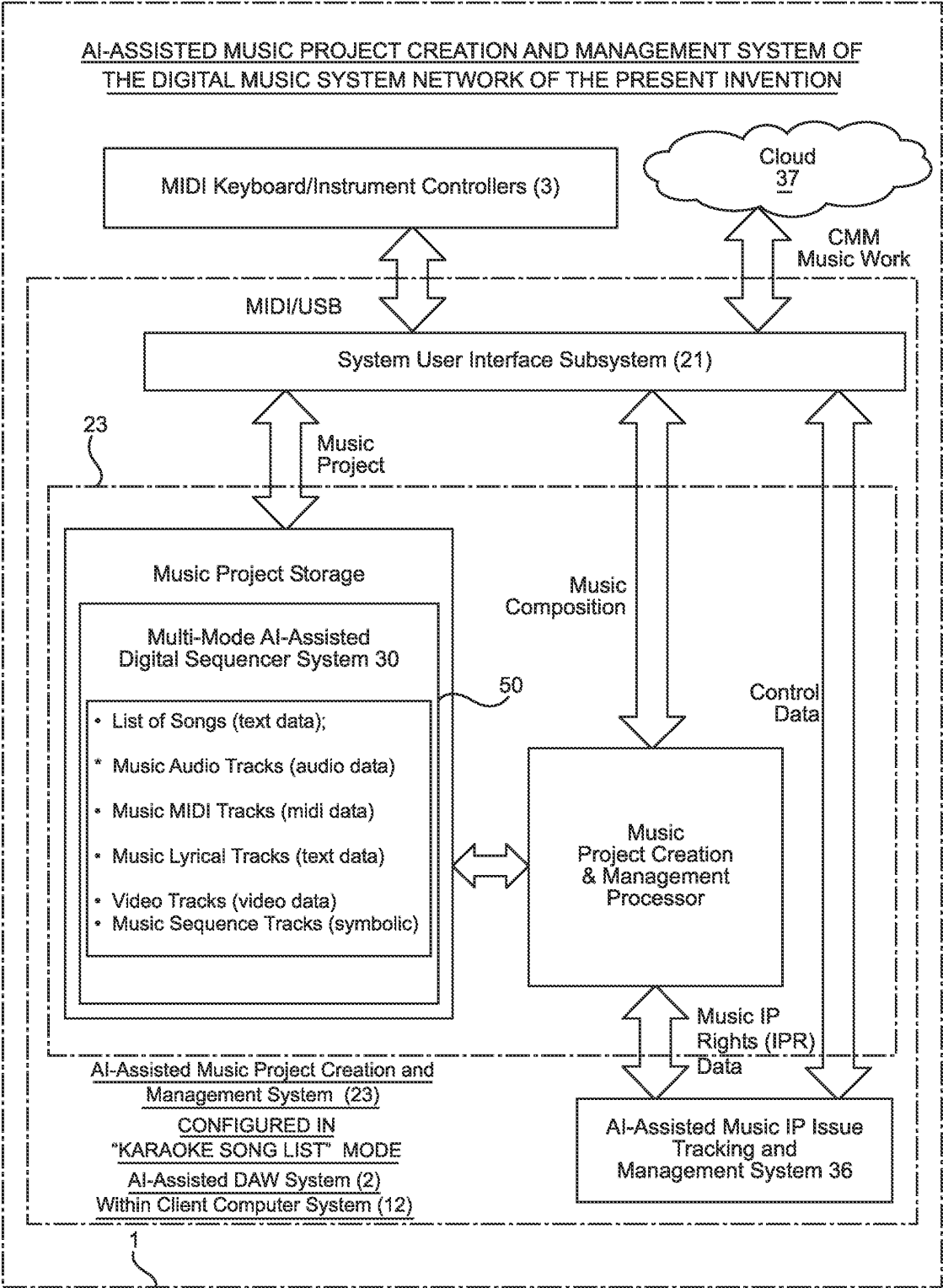


FIG. 38C

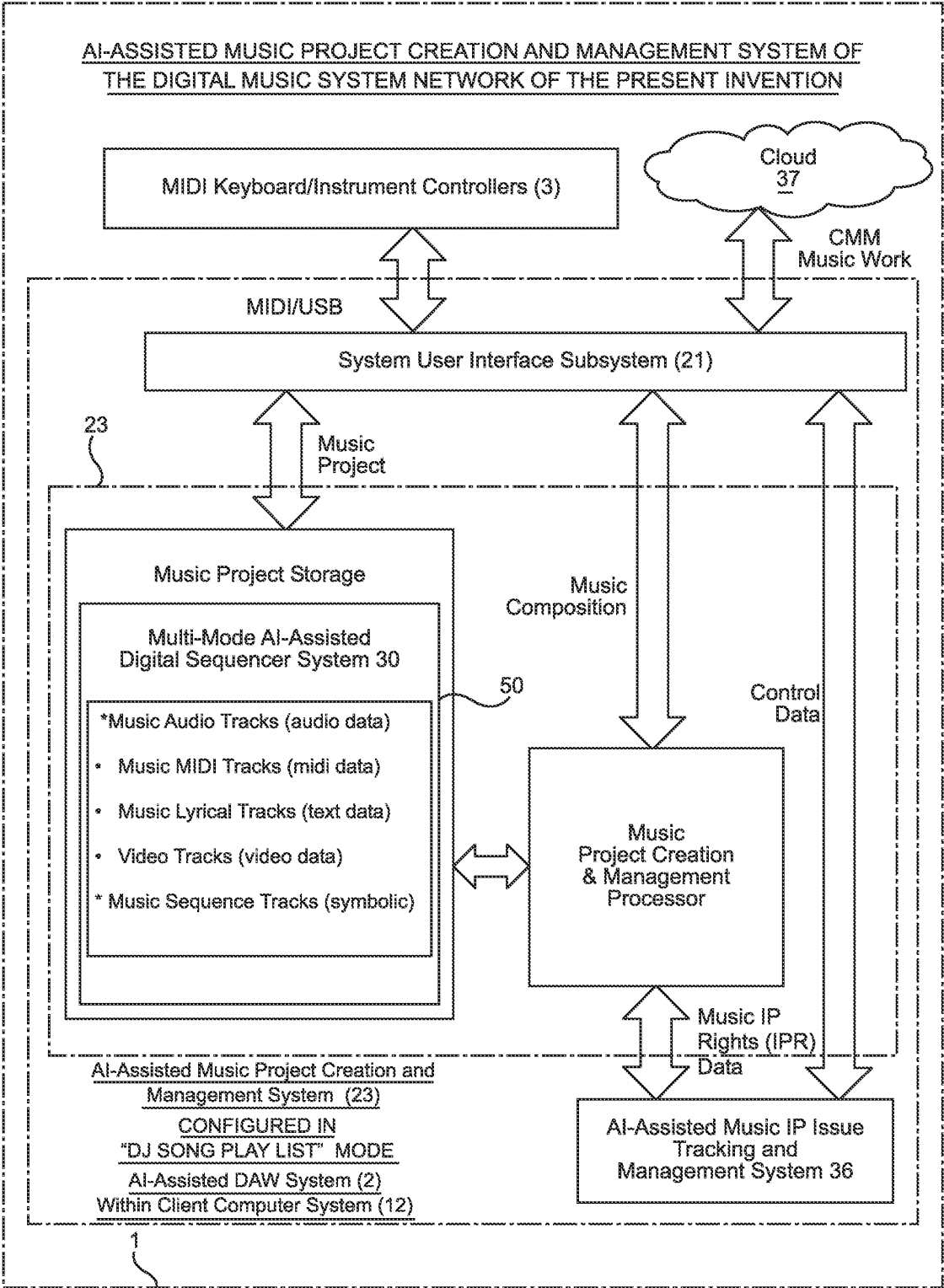


FIG. 38D

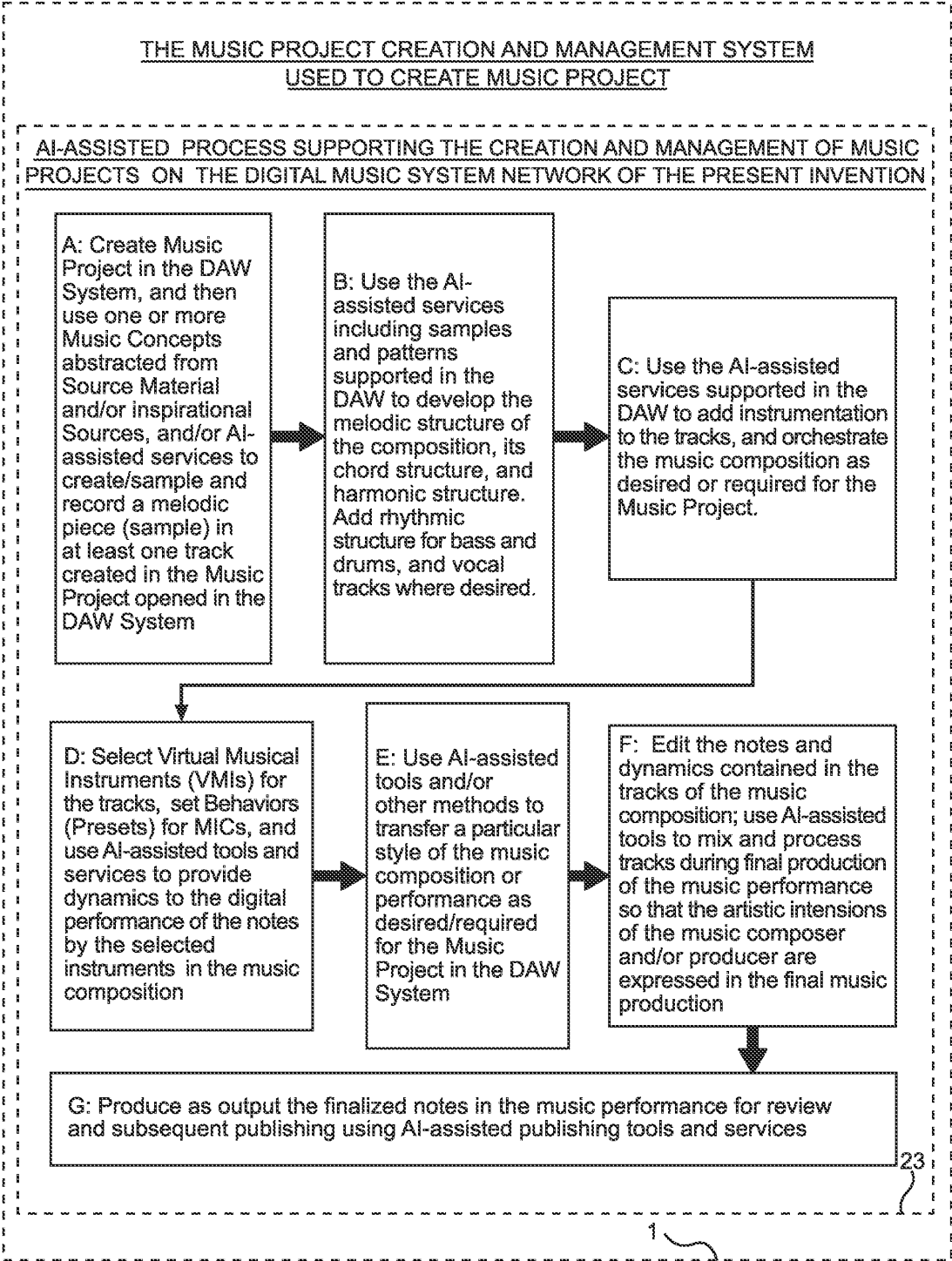


FIG. 39

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

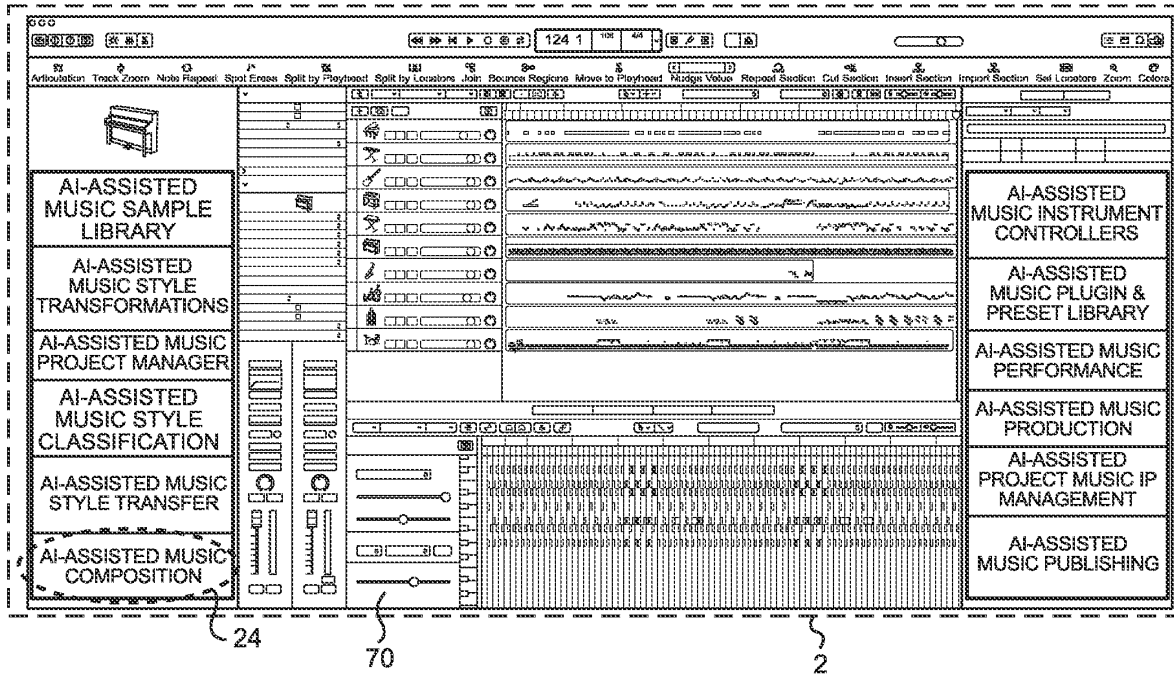


FIG. 40

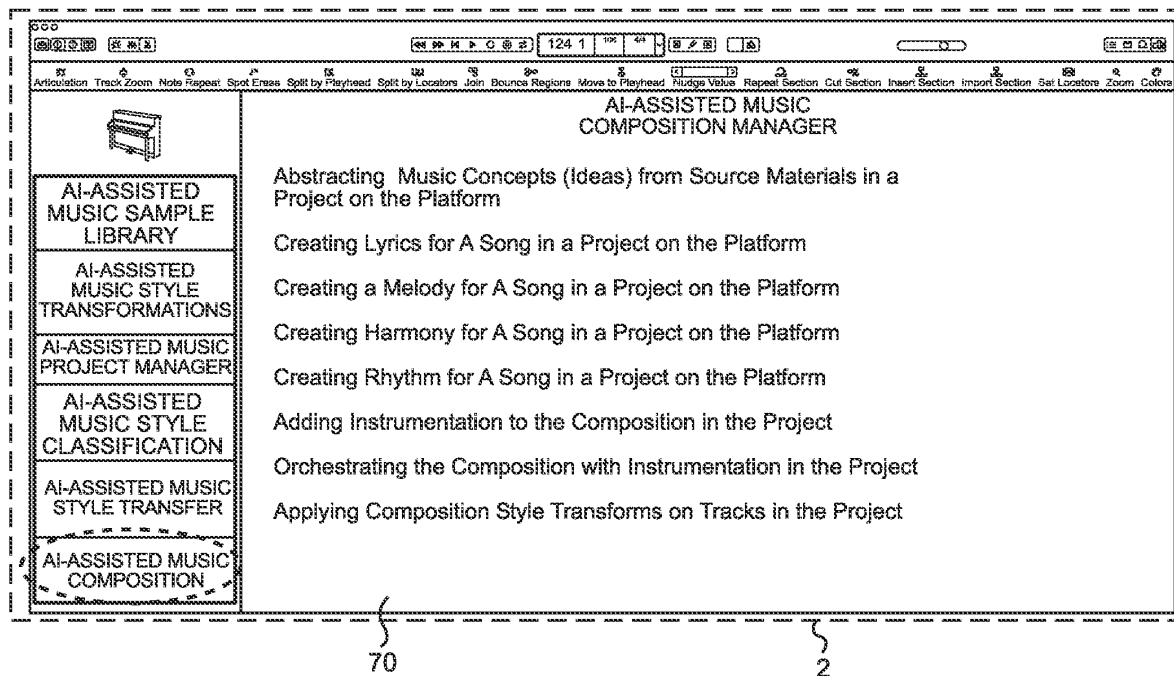


FIG. 40A

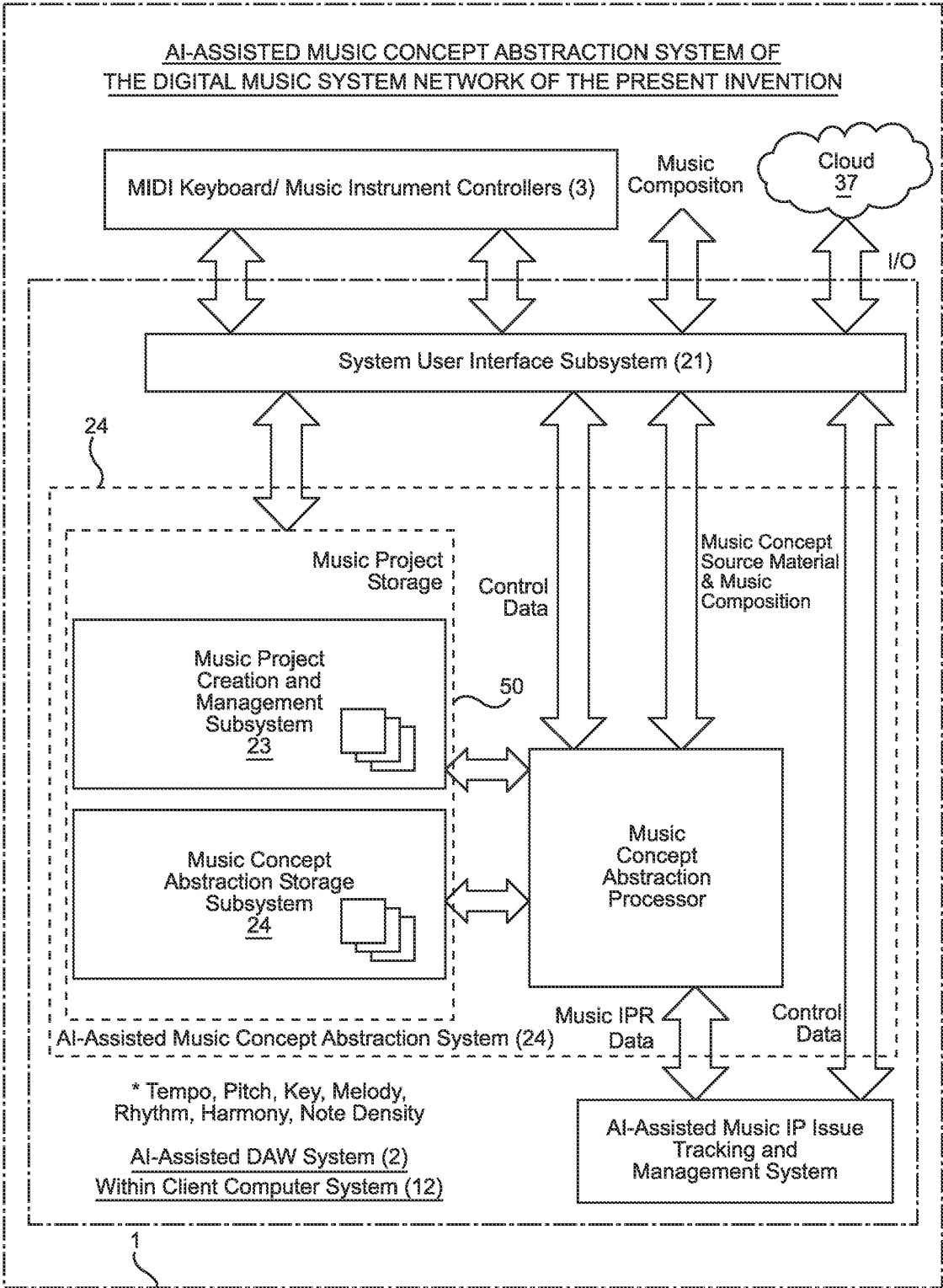
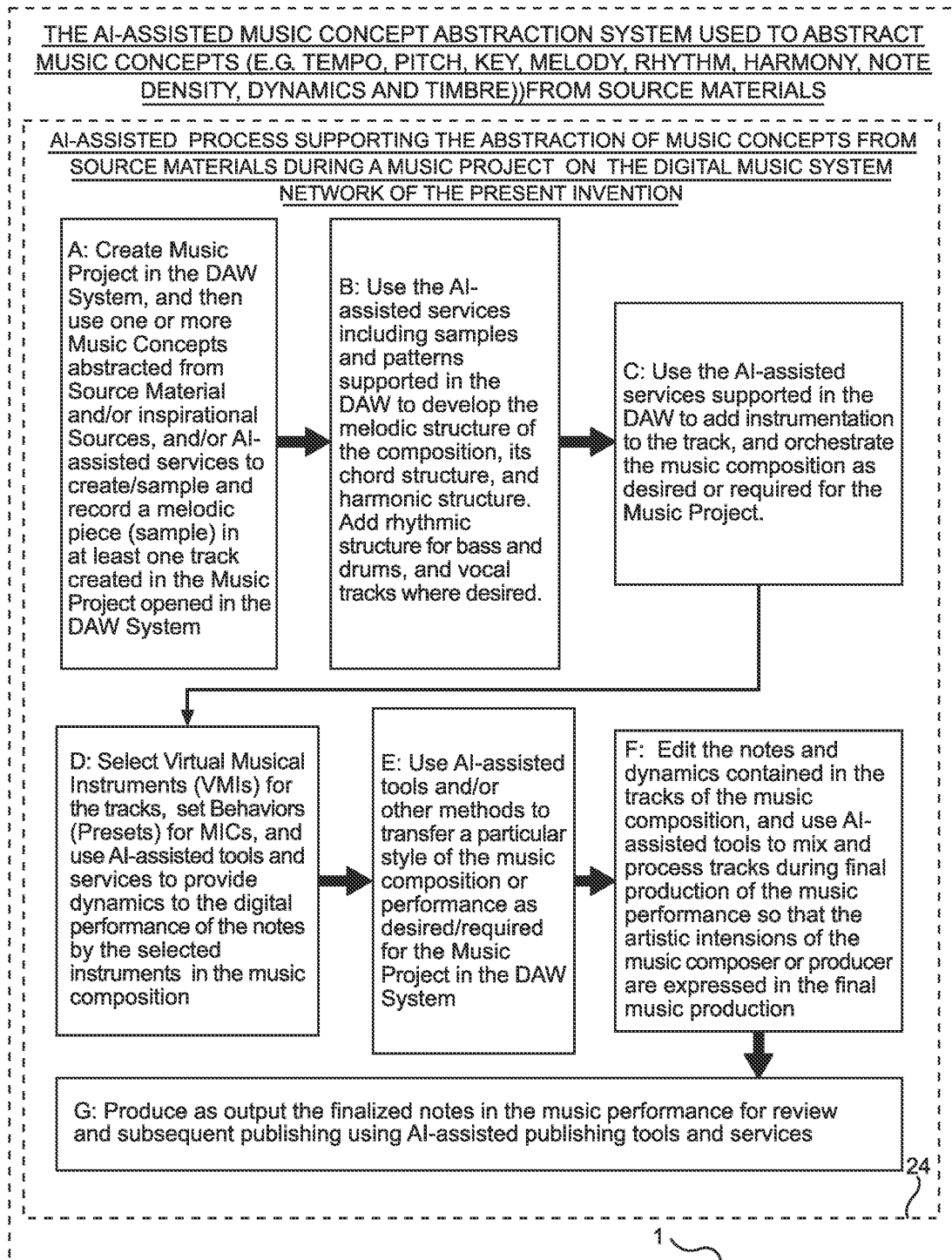


FIG. 41

**FIG. 42**

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

25

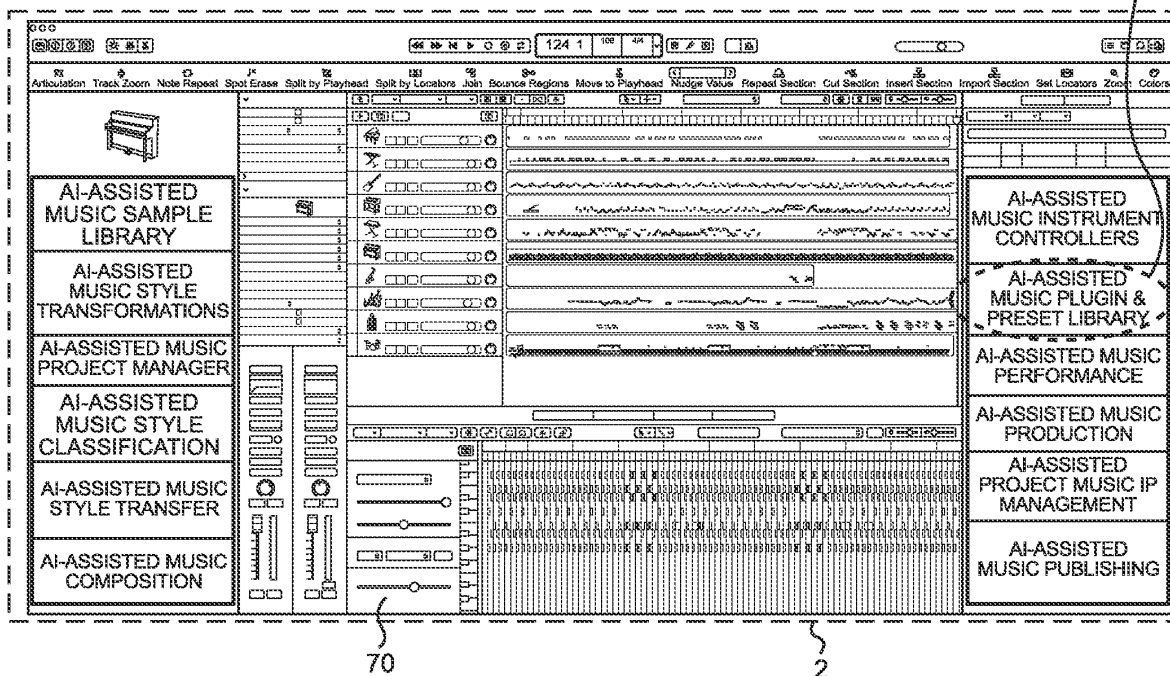


FIG. 43

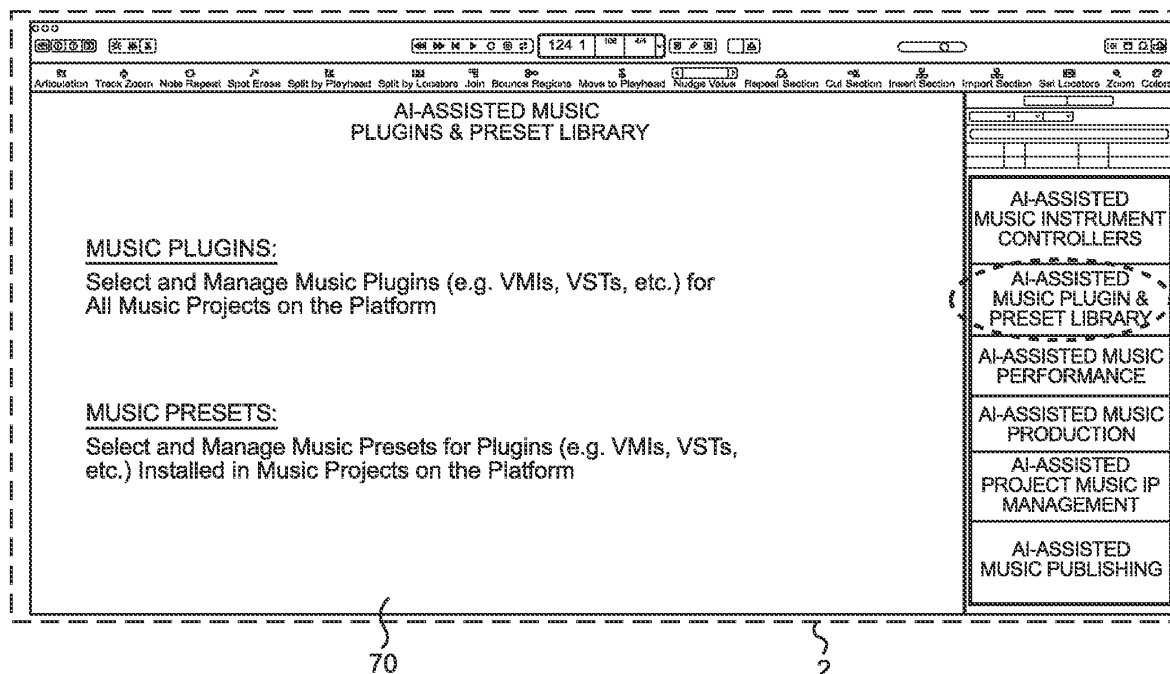


FIG. 43A

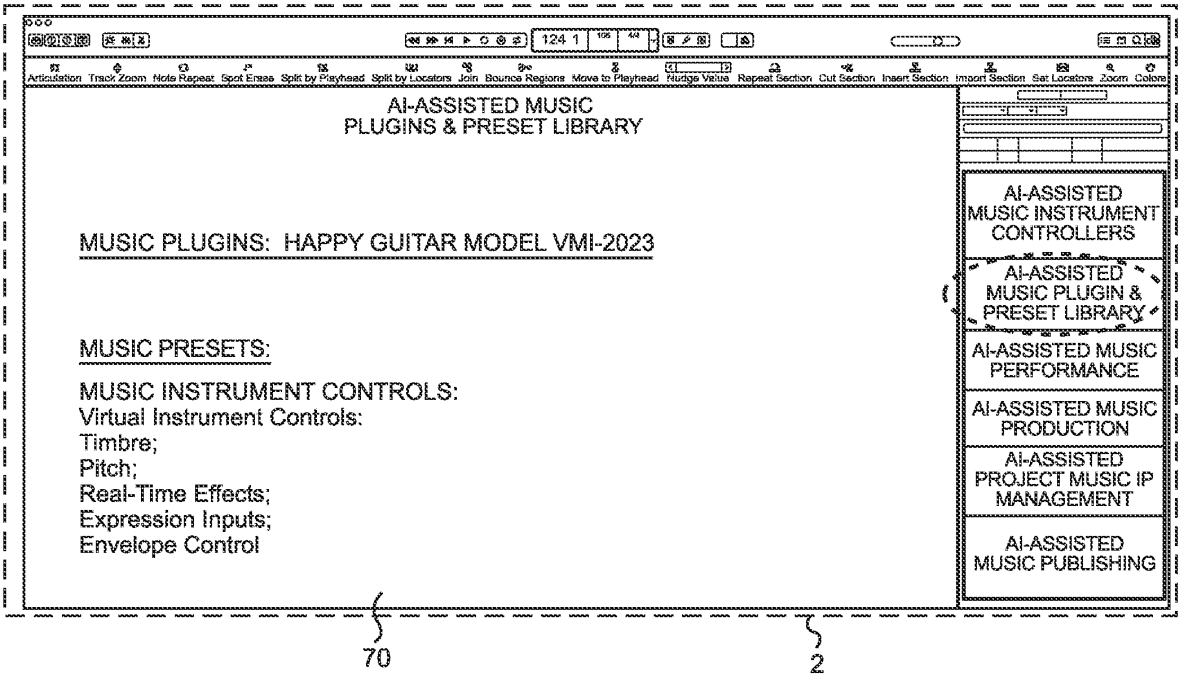


FIG. 43A

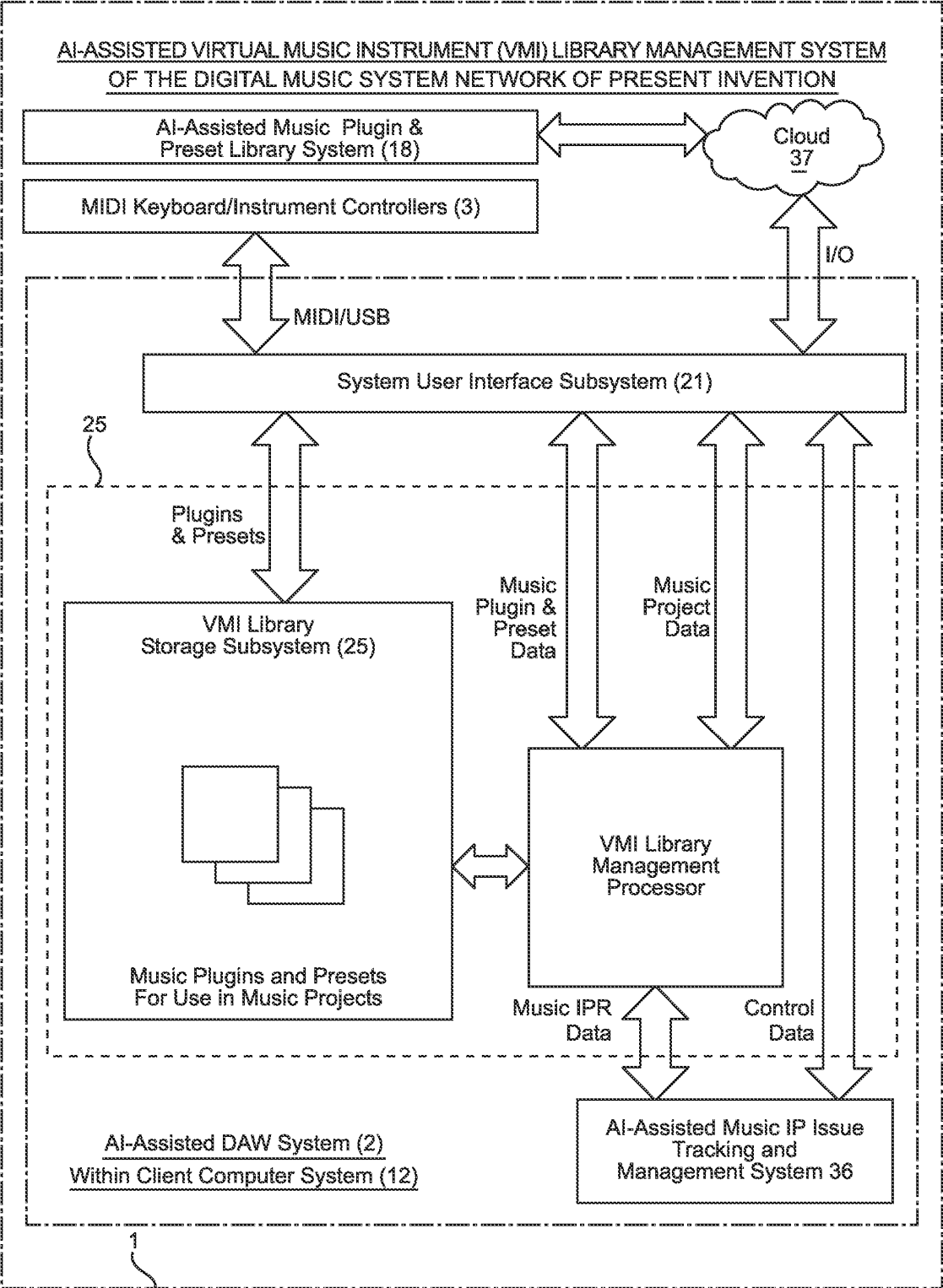


FIG. 44

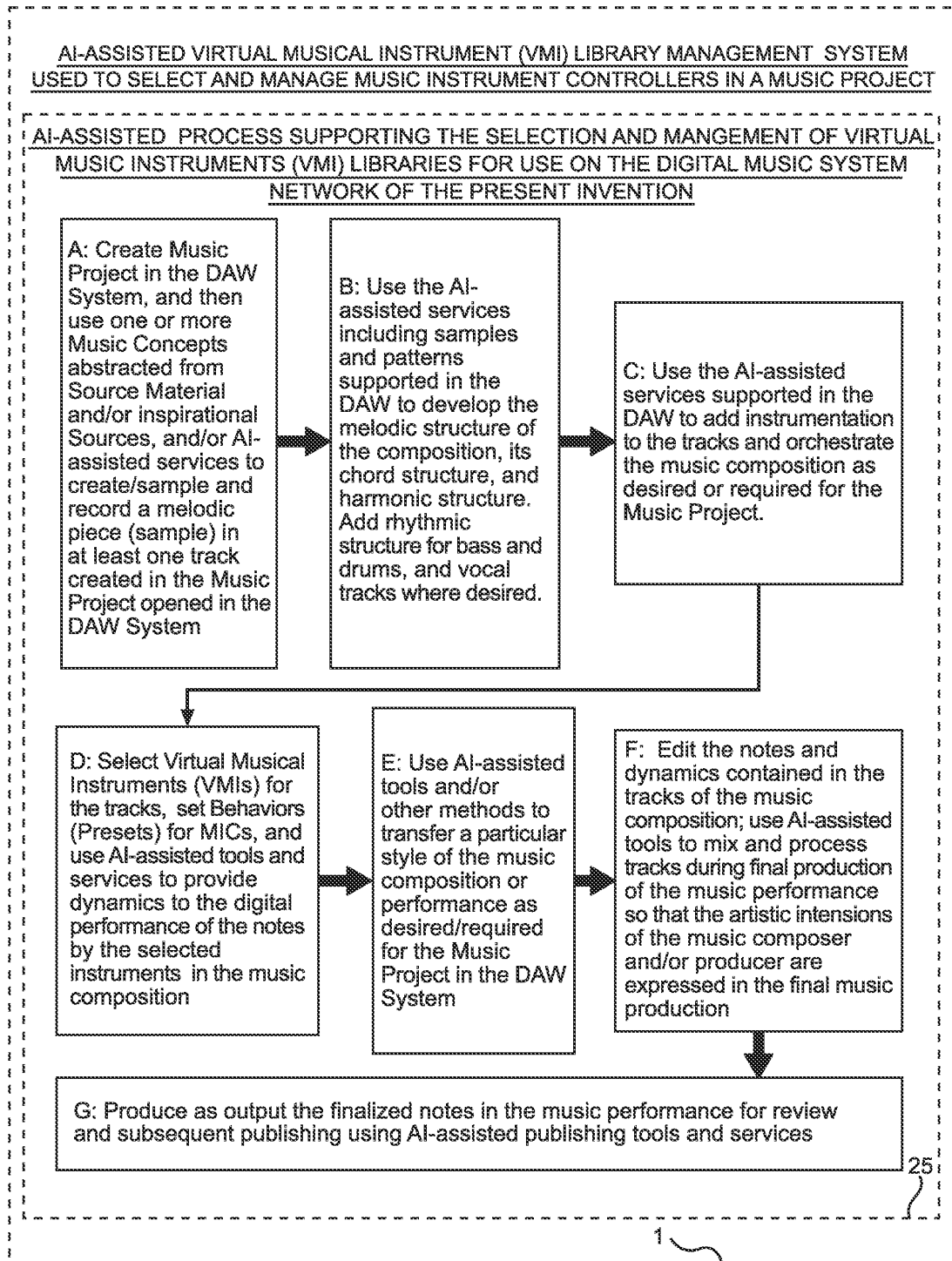


FIG. 45

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

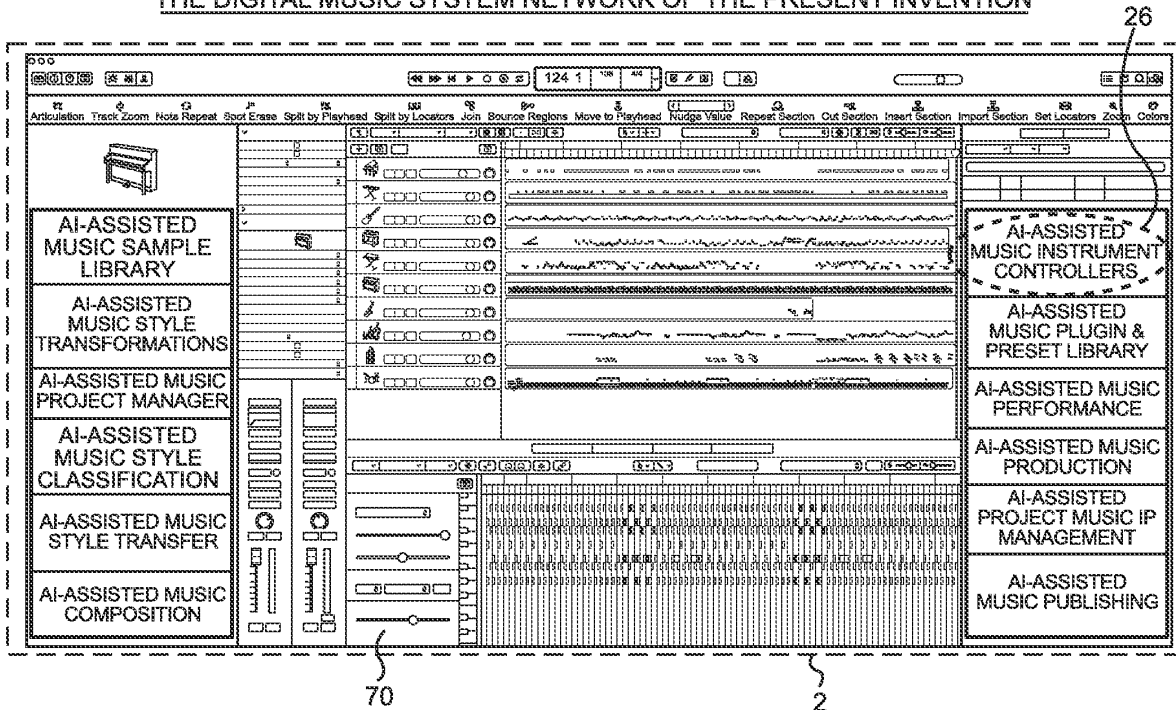


FIG. 46

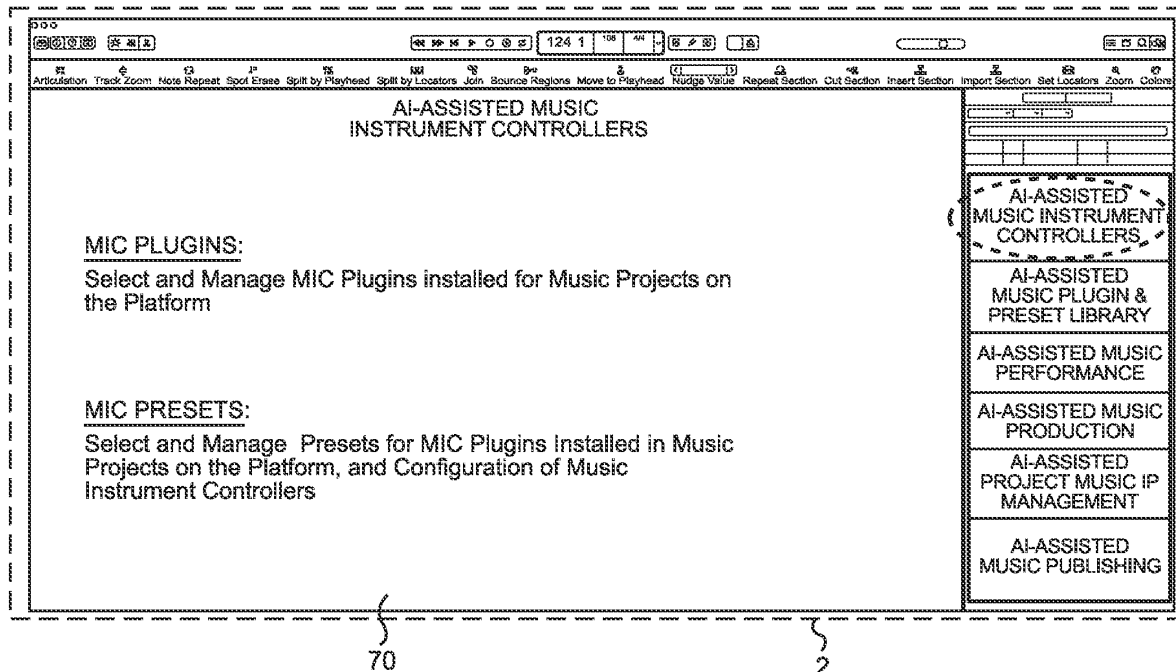
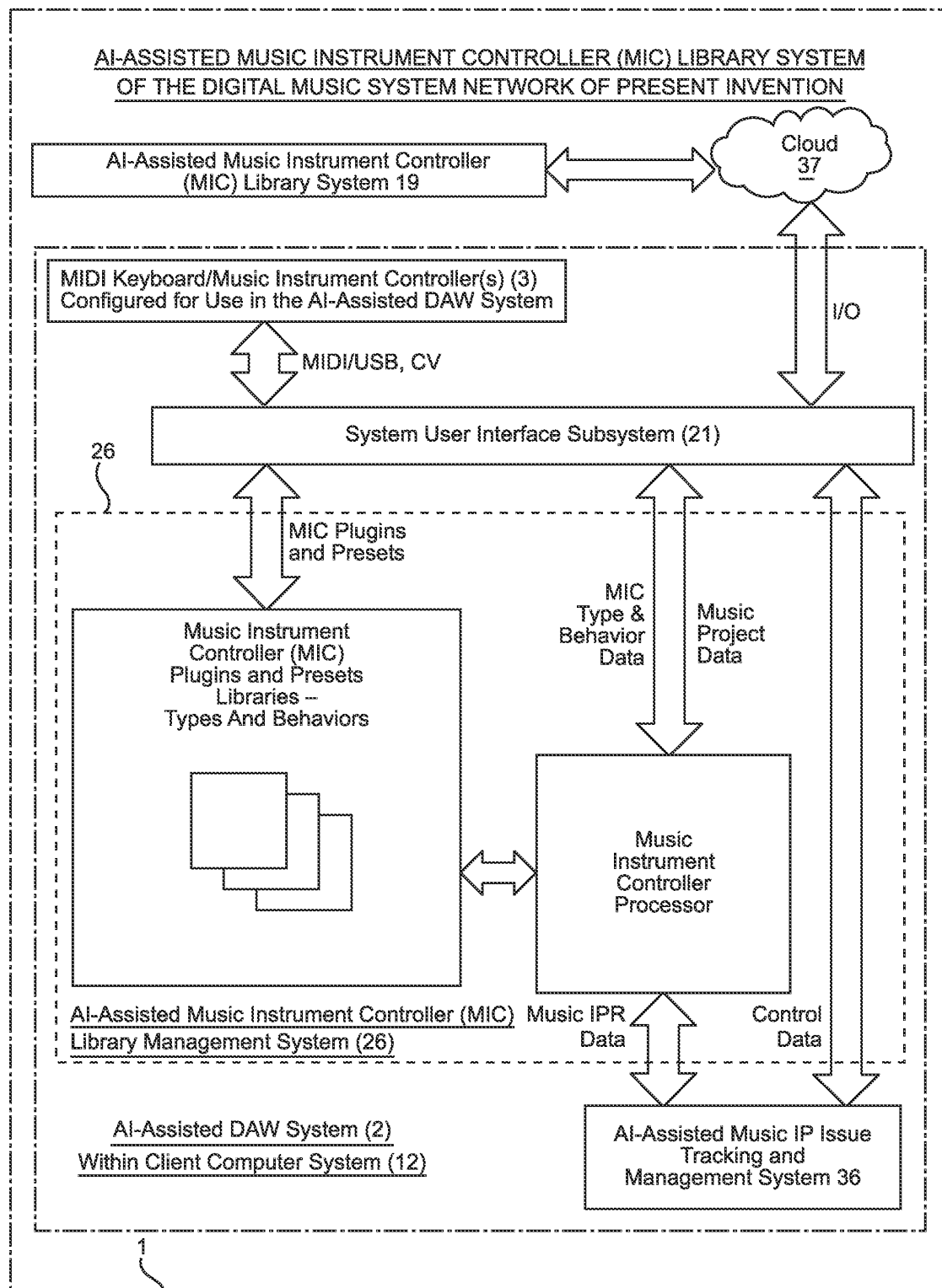


FIG. 46A

**FIG. 47**

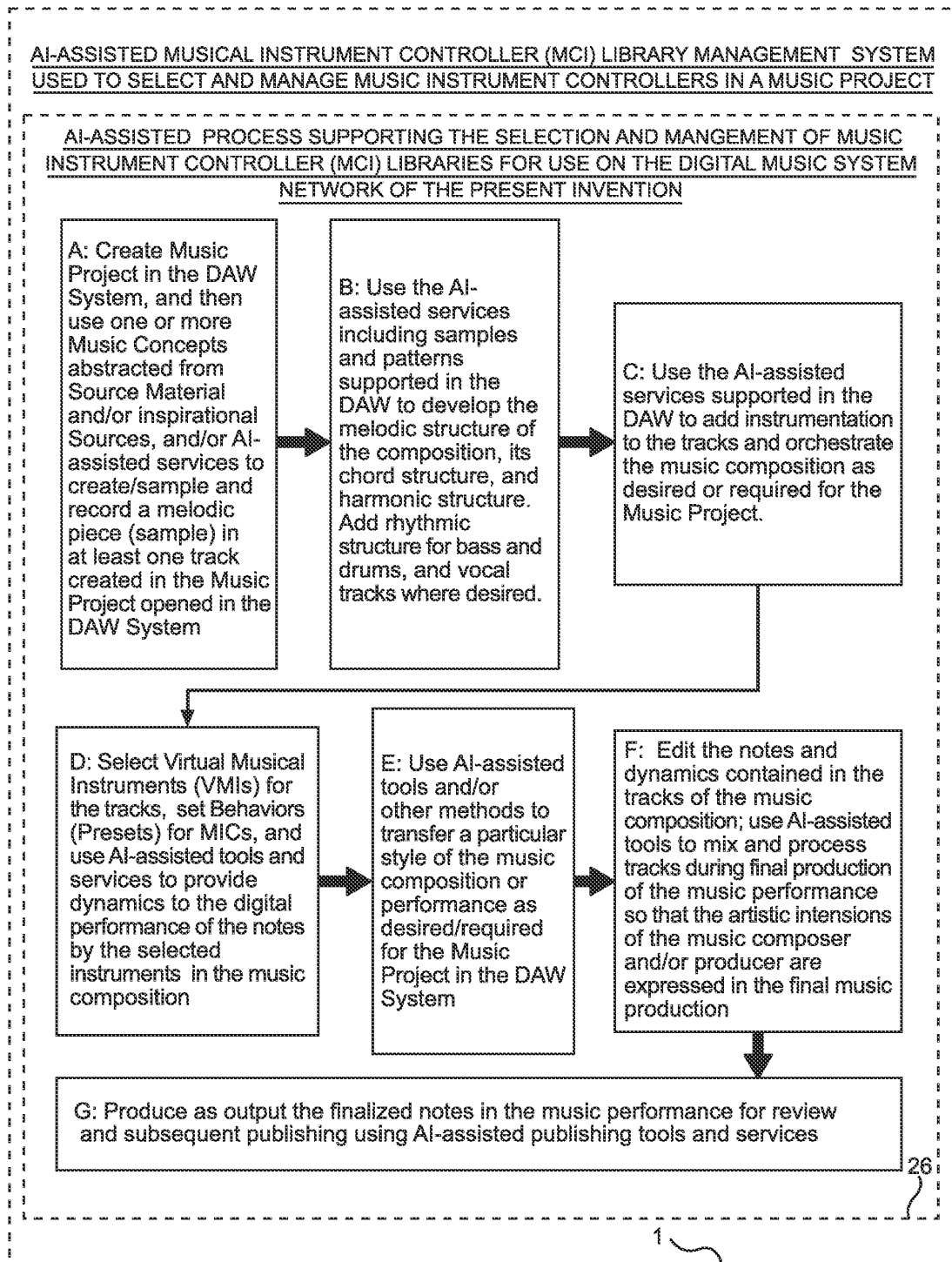


FIG. 48

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

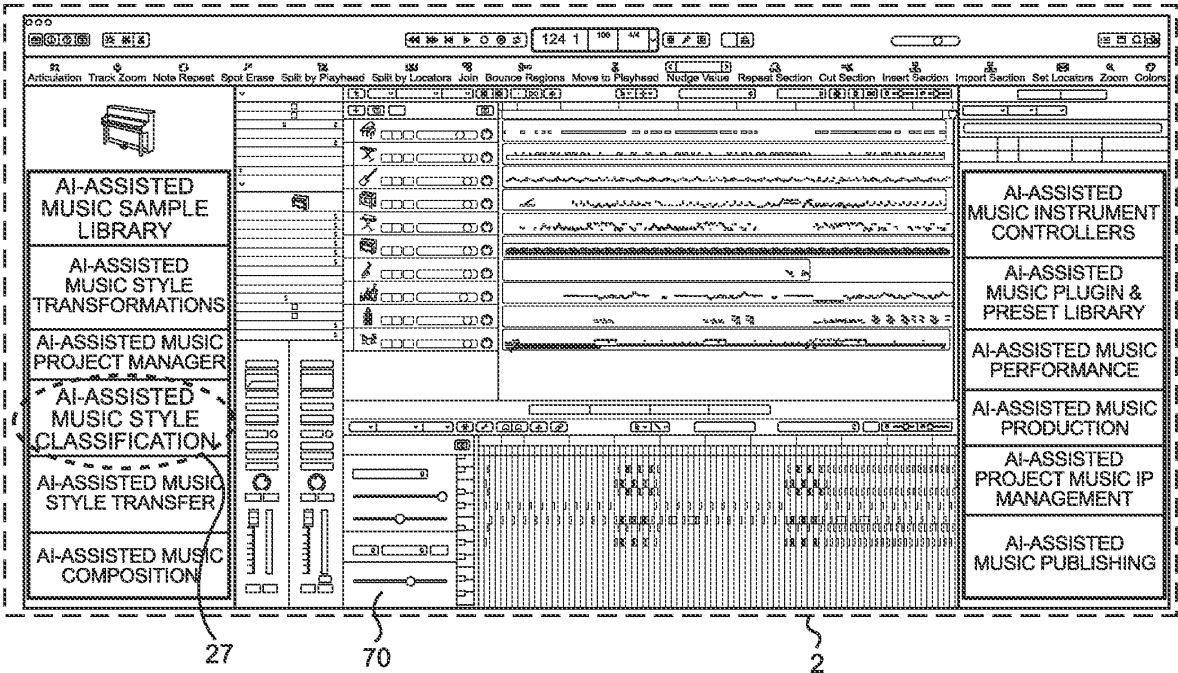
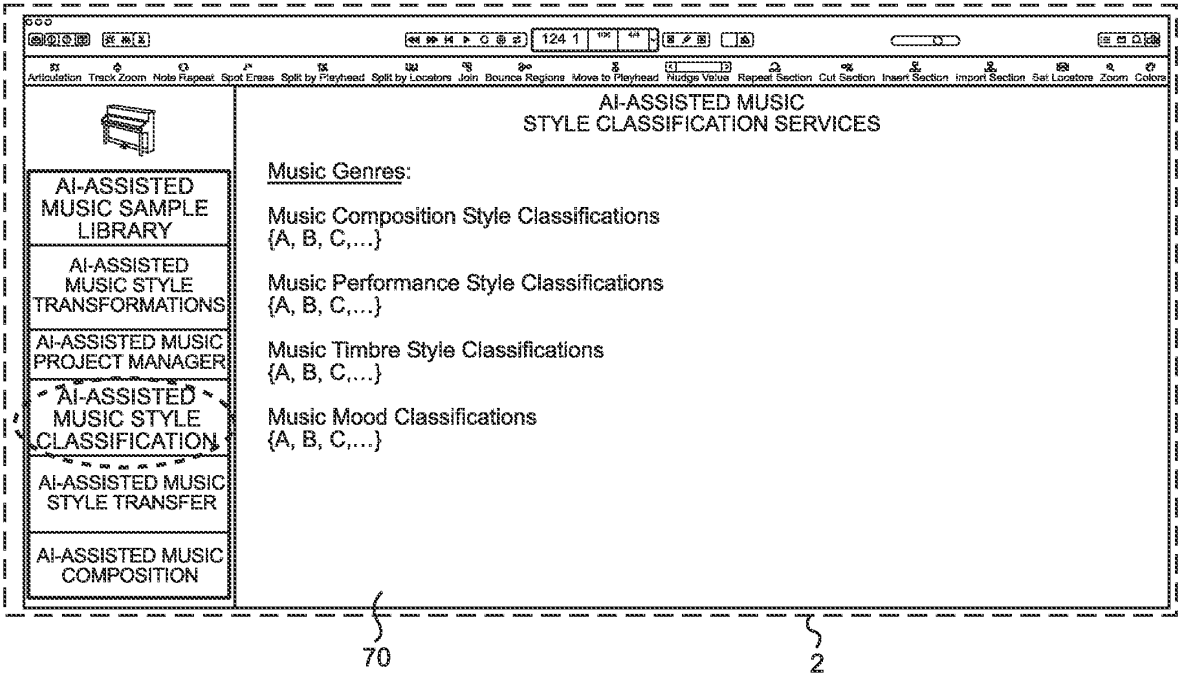
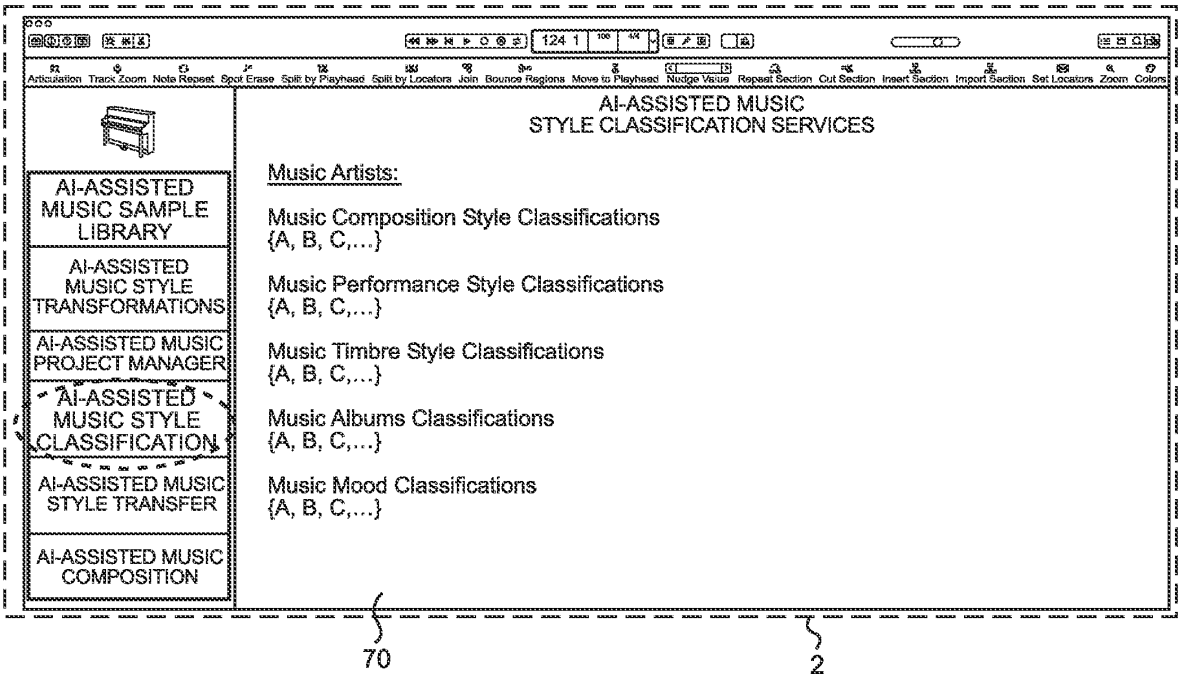
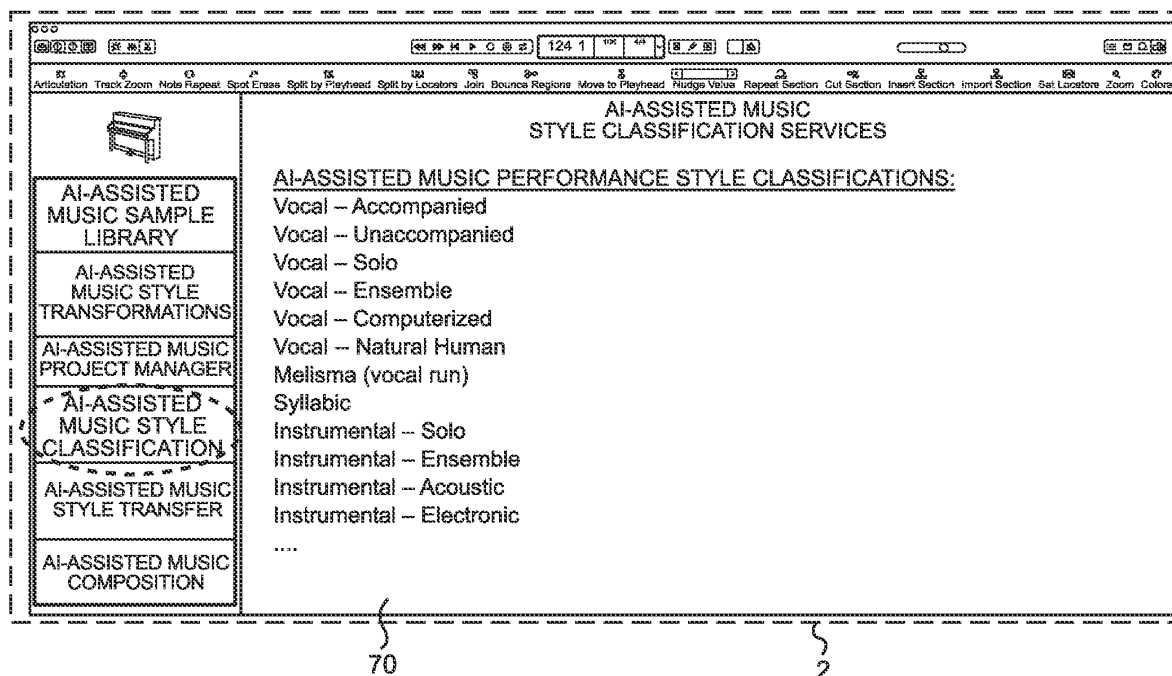
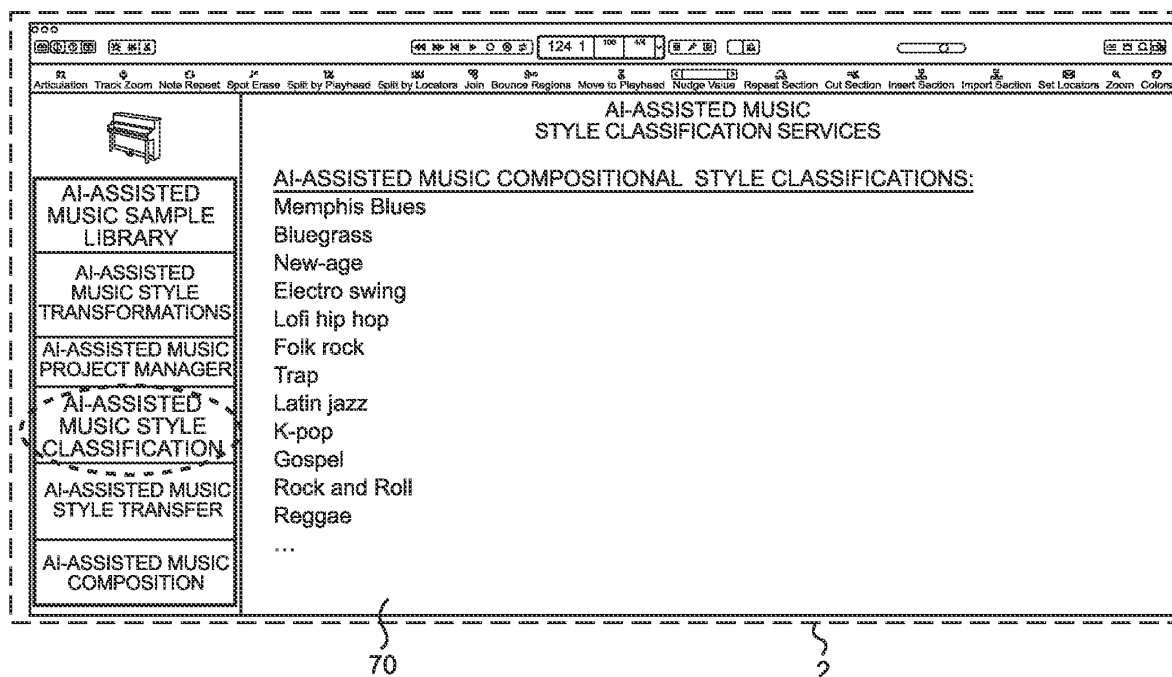
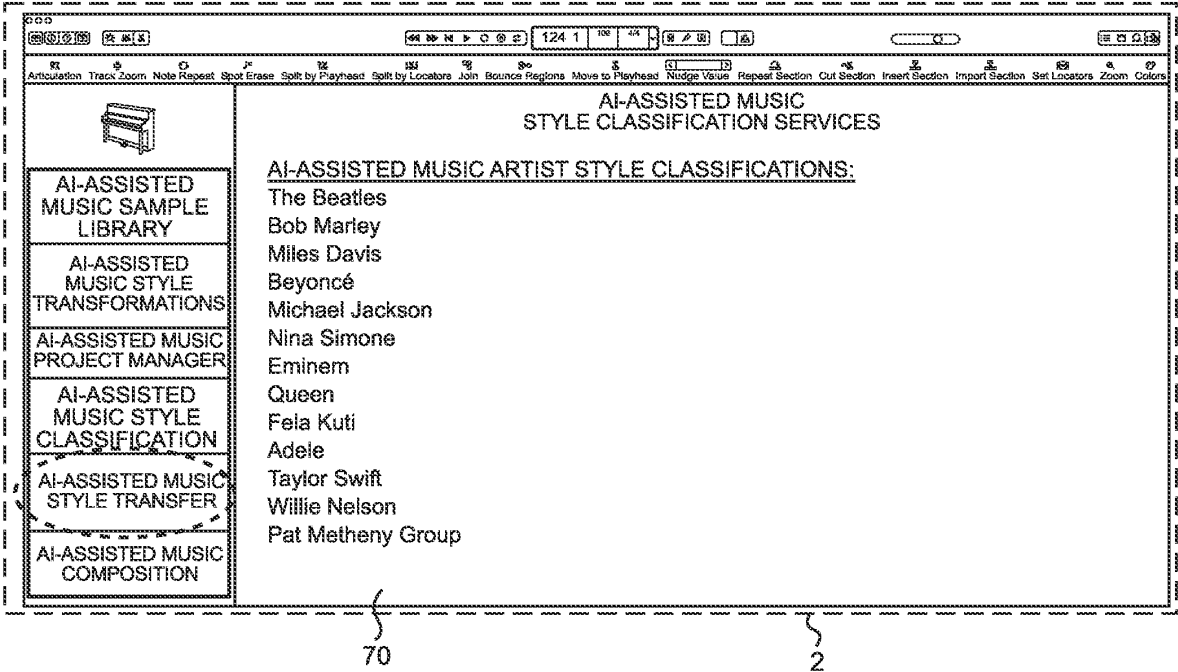
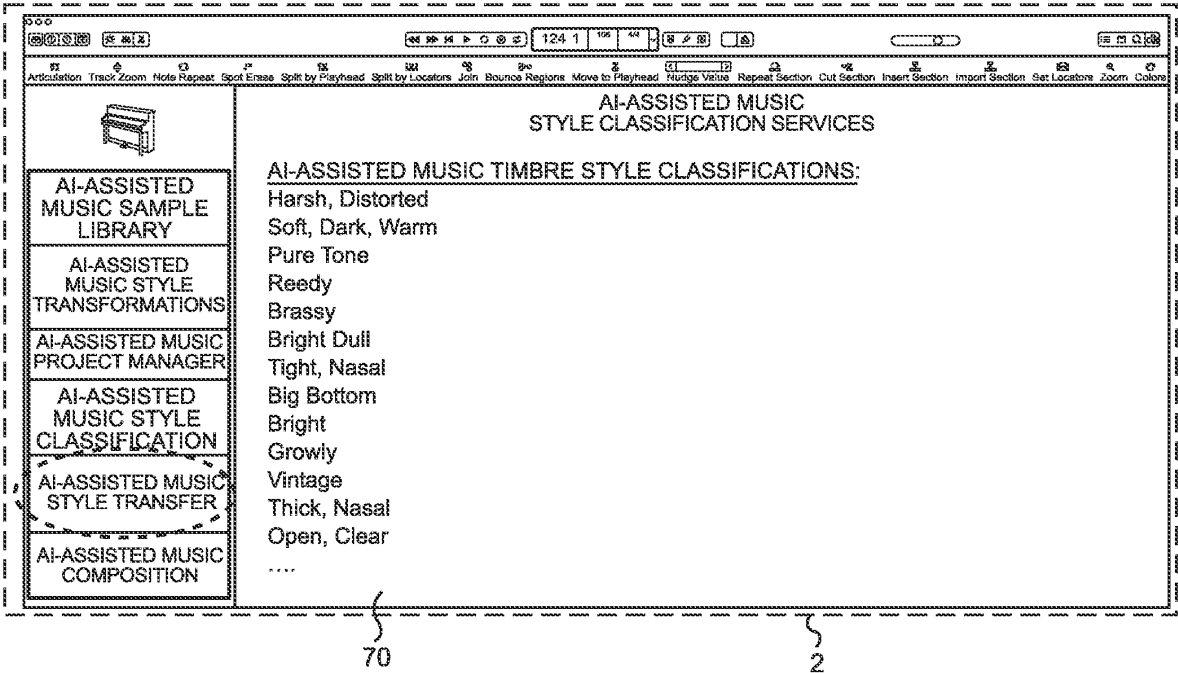


FIG. 49







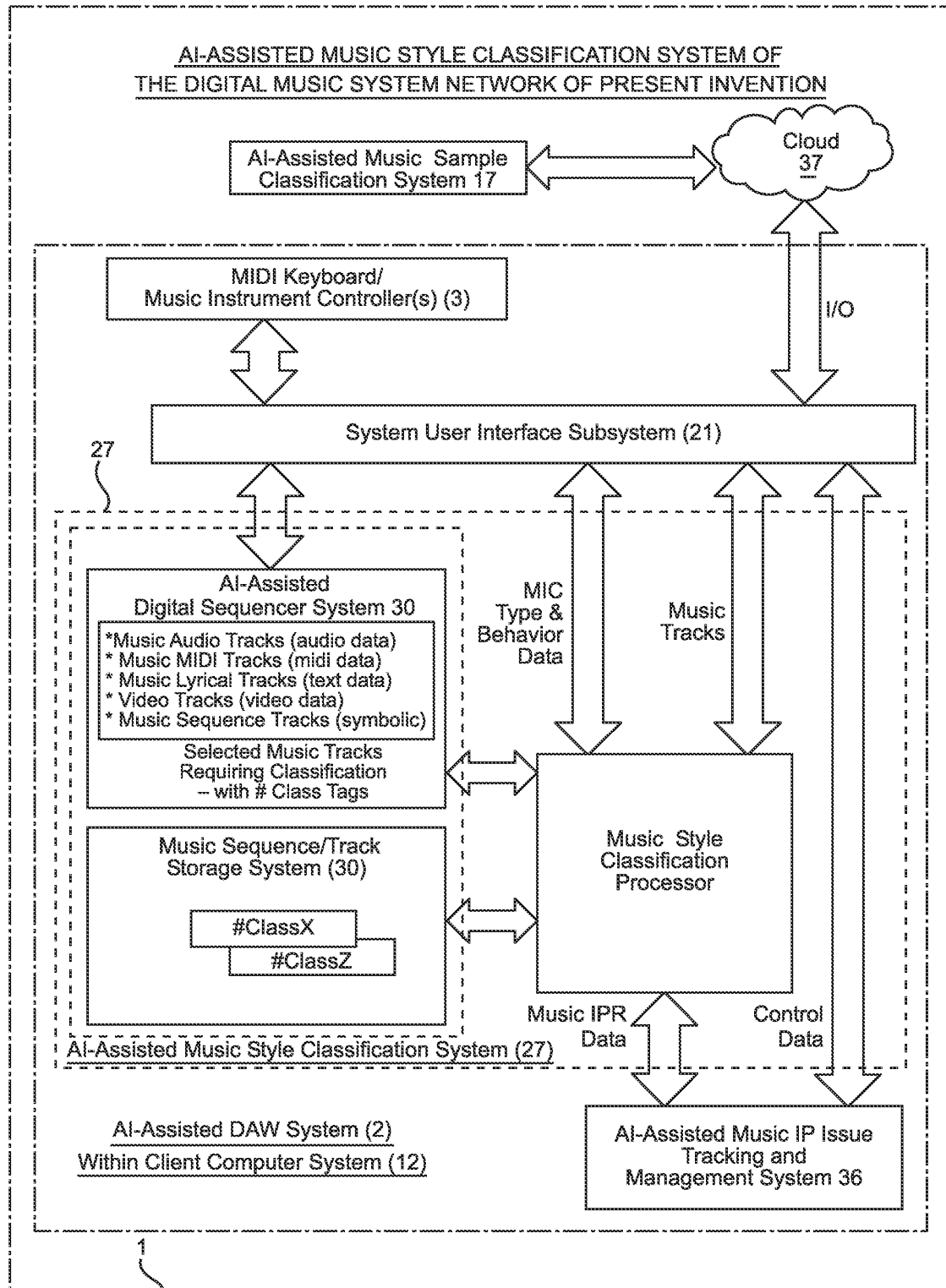


FIG. 50

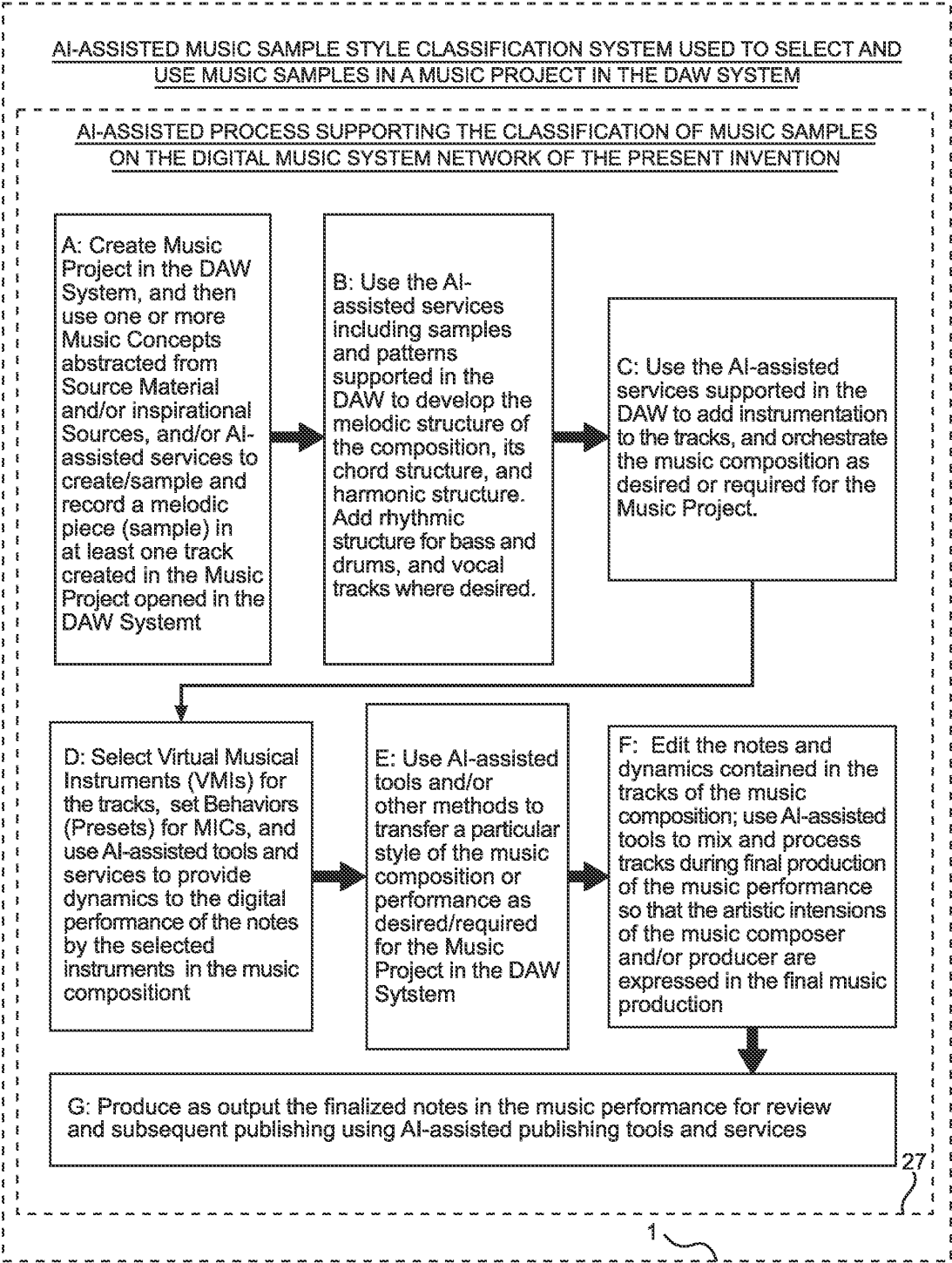


FIG. 51

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

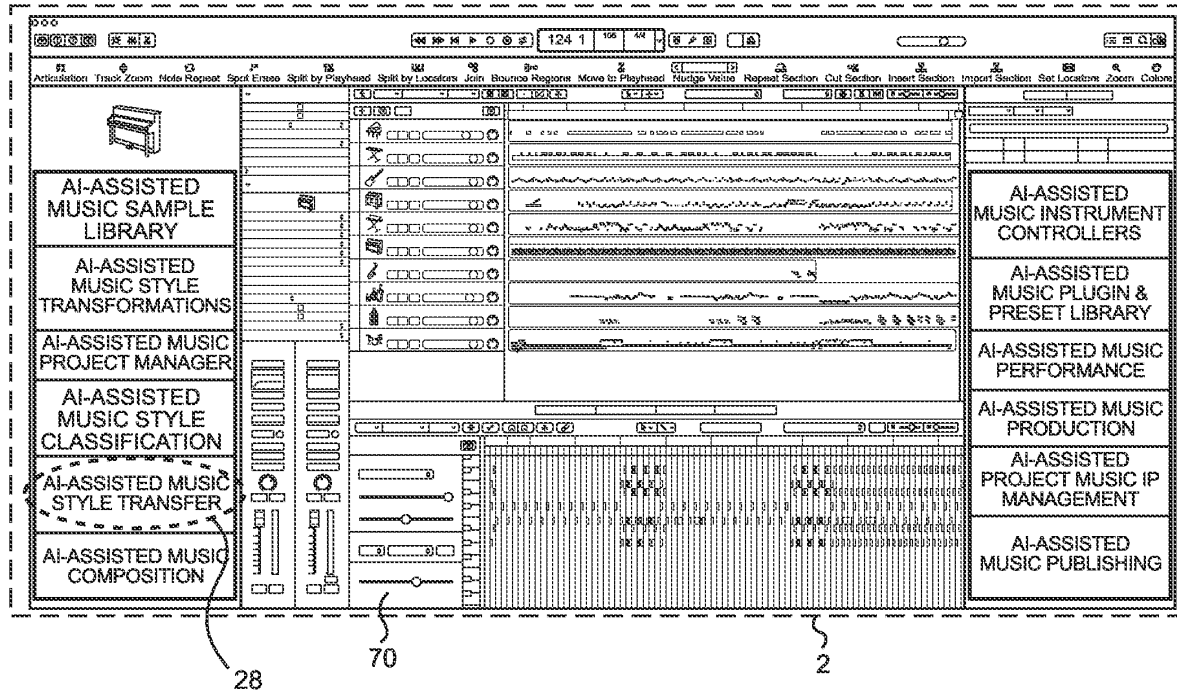
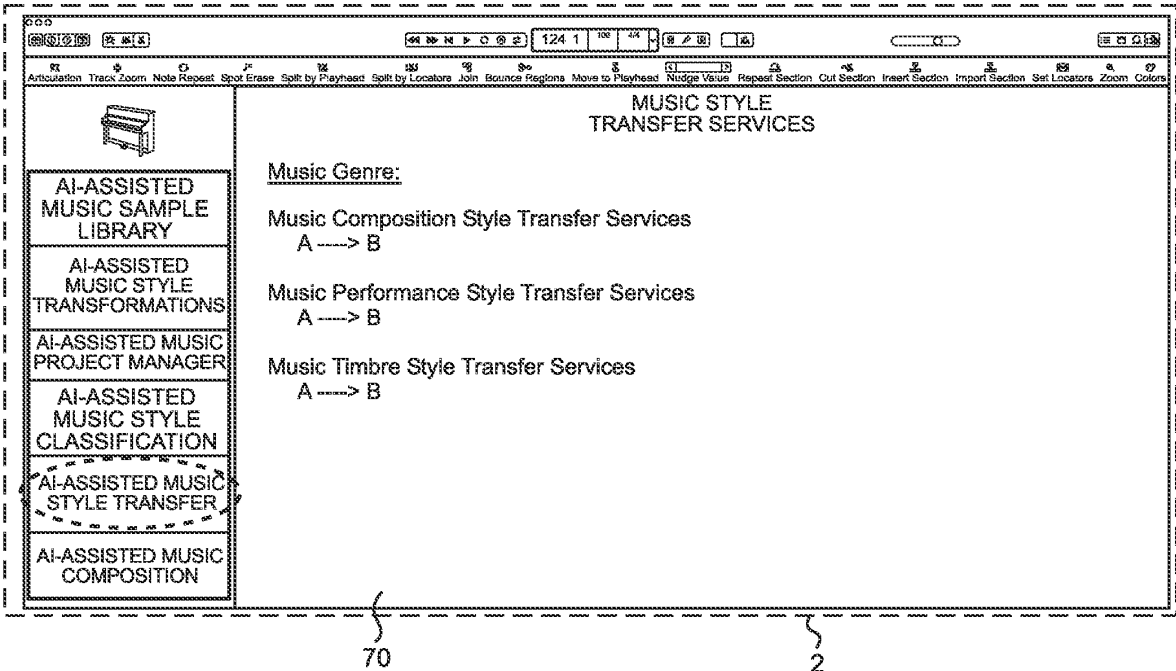
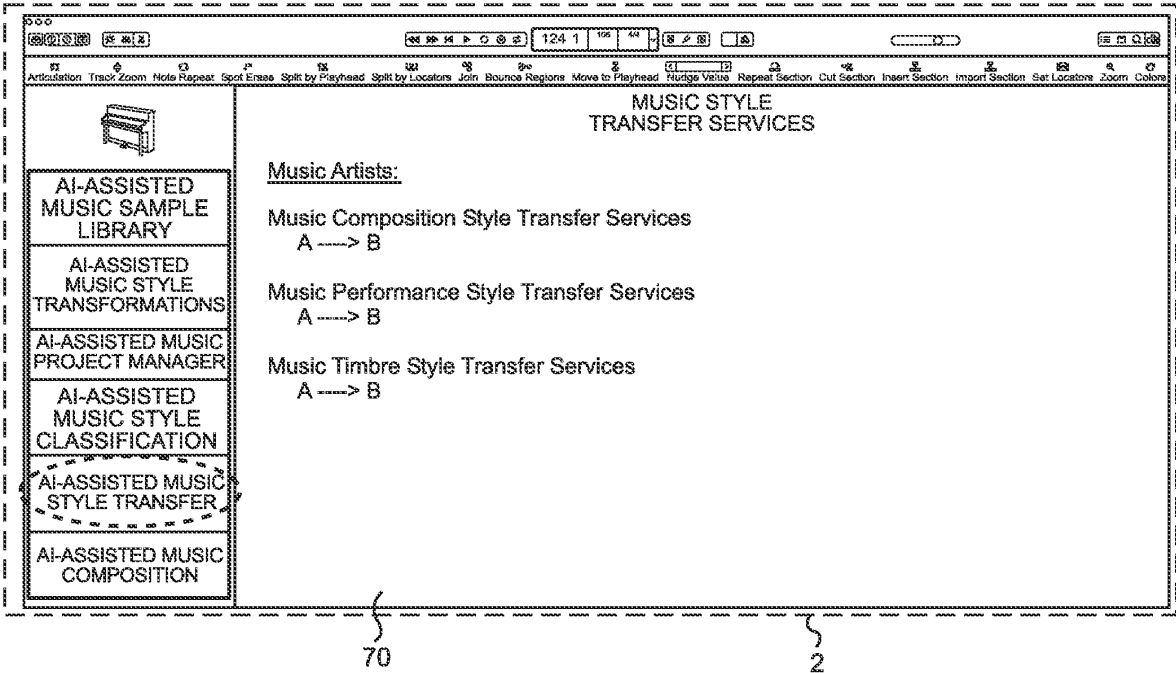


FIG. 52



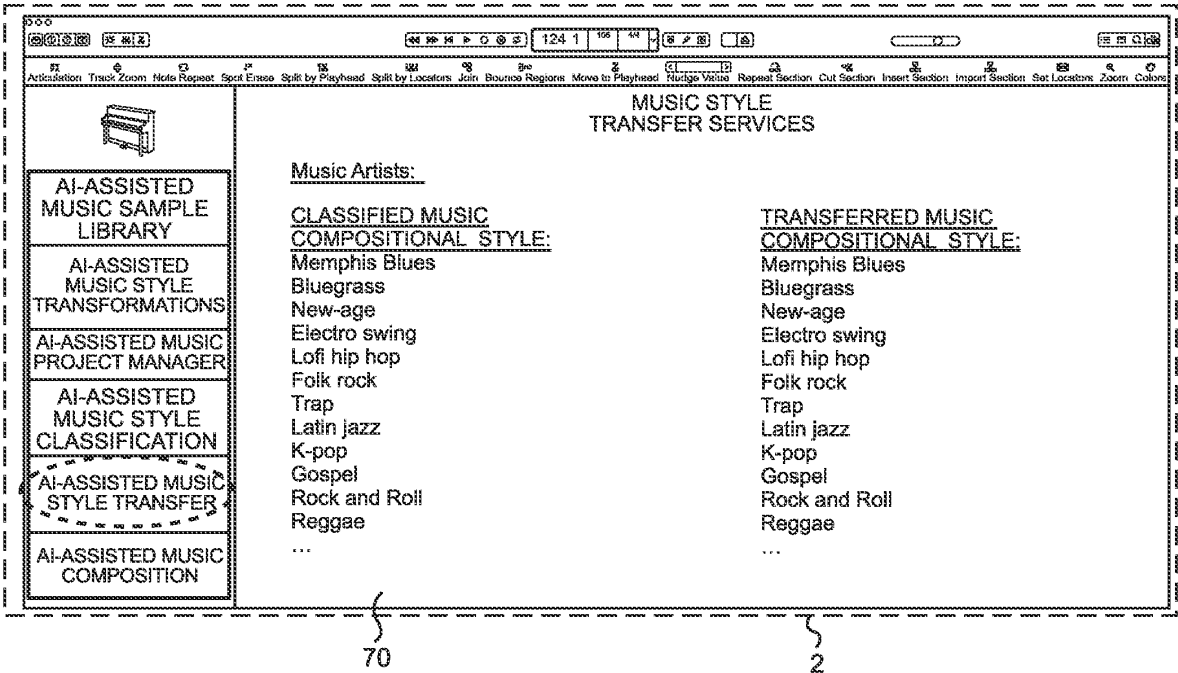


FIG. 52B1

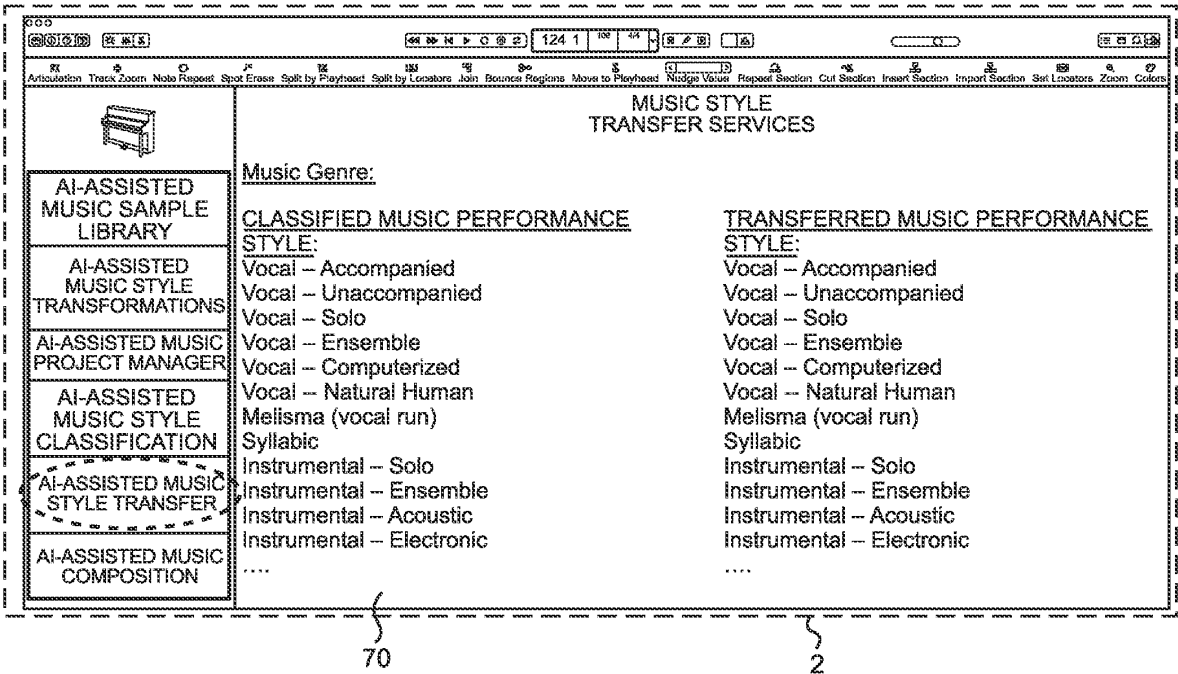
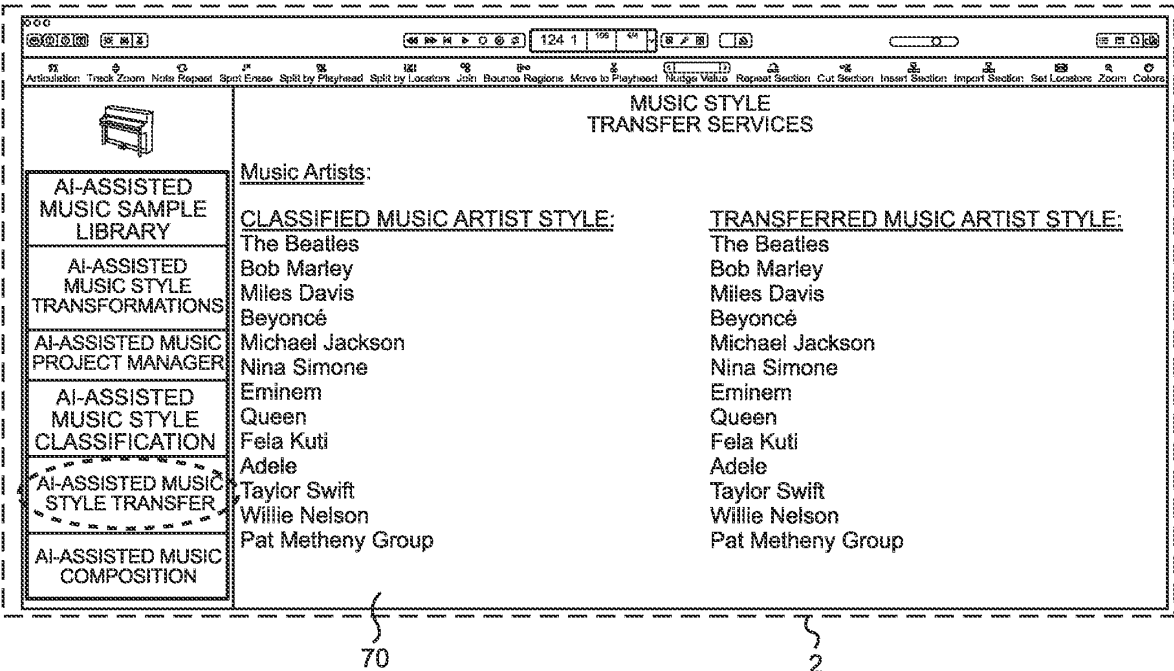
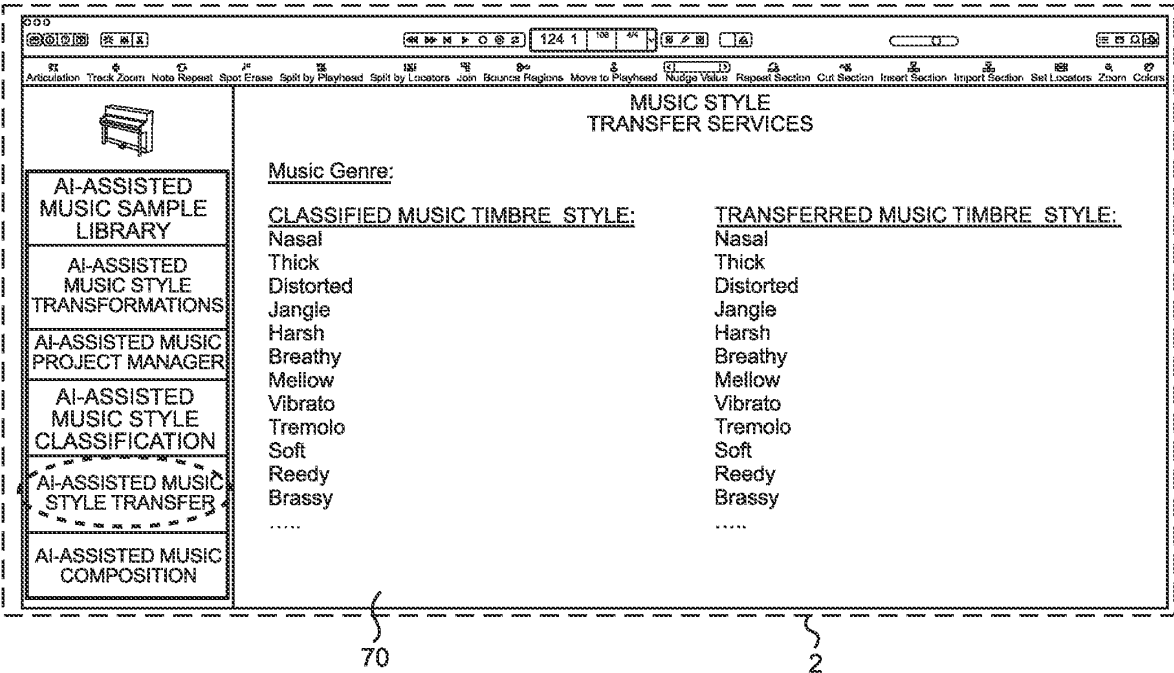


FIG. 52B2



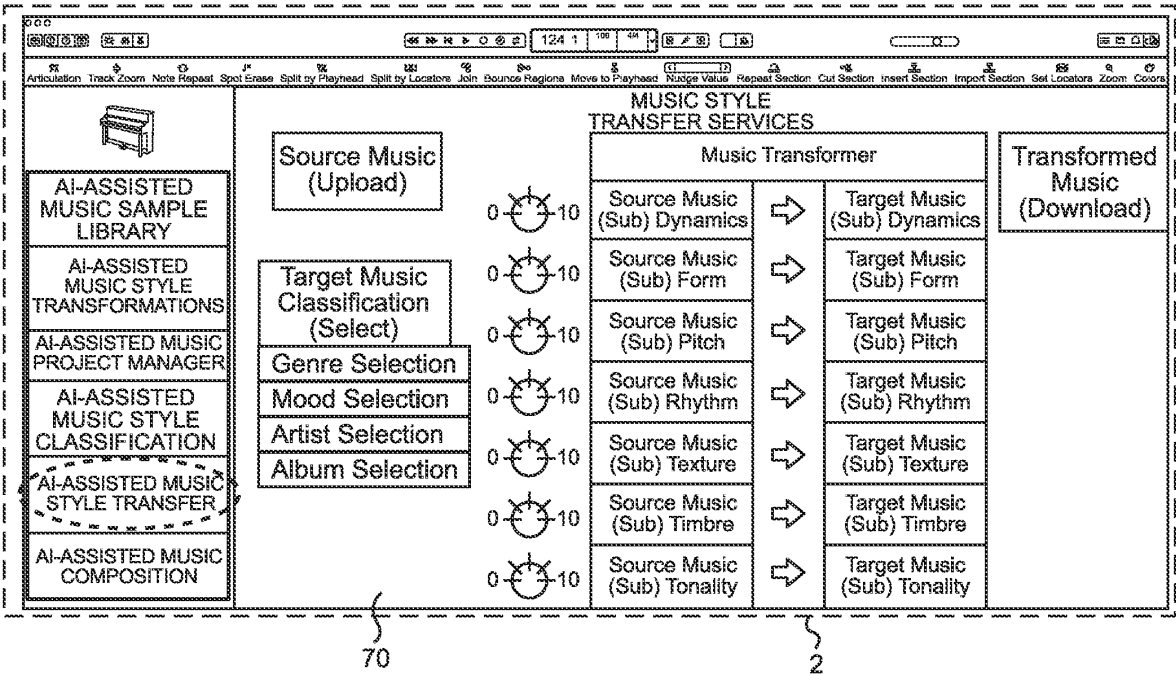


FIG. 52B5

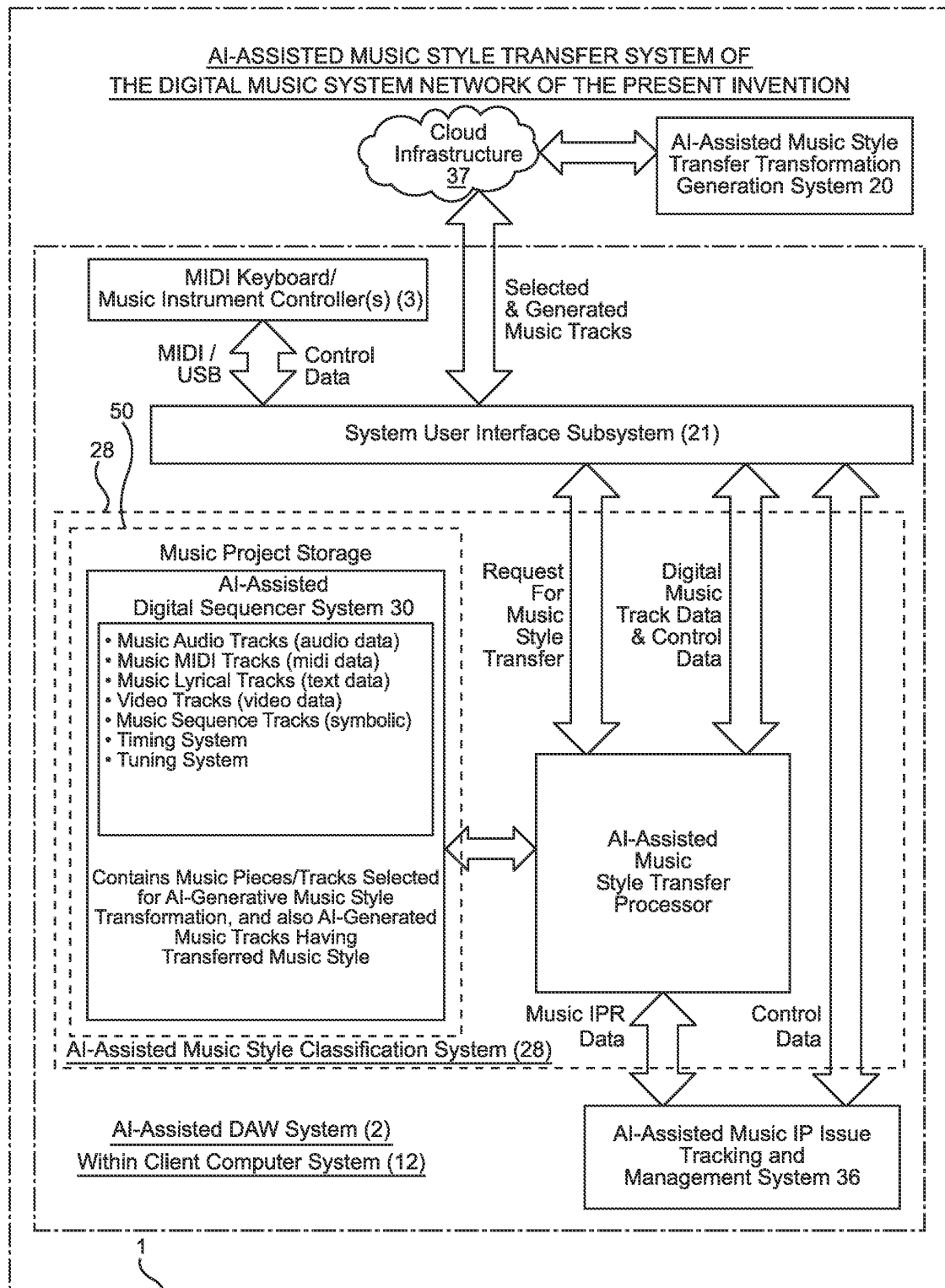
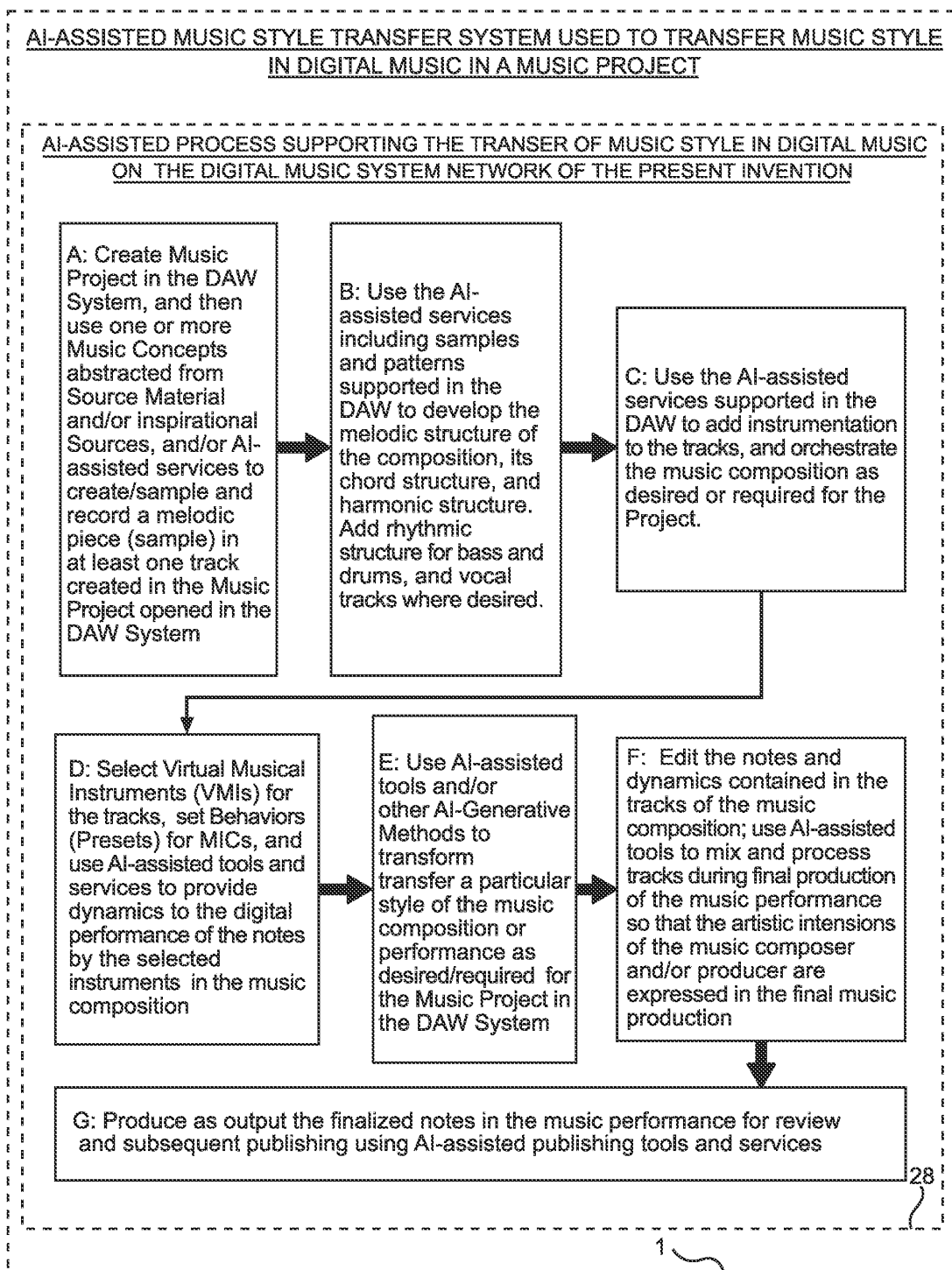


FIG. 53

**FIG. 54**

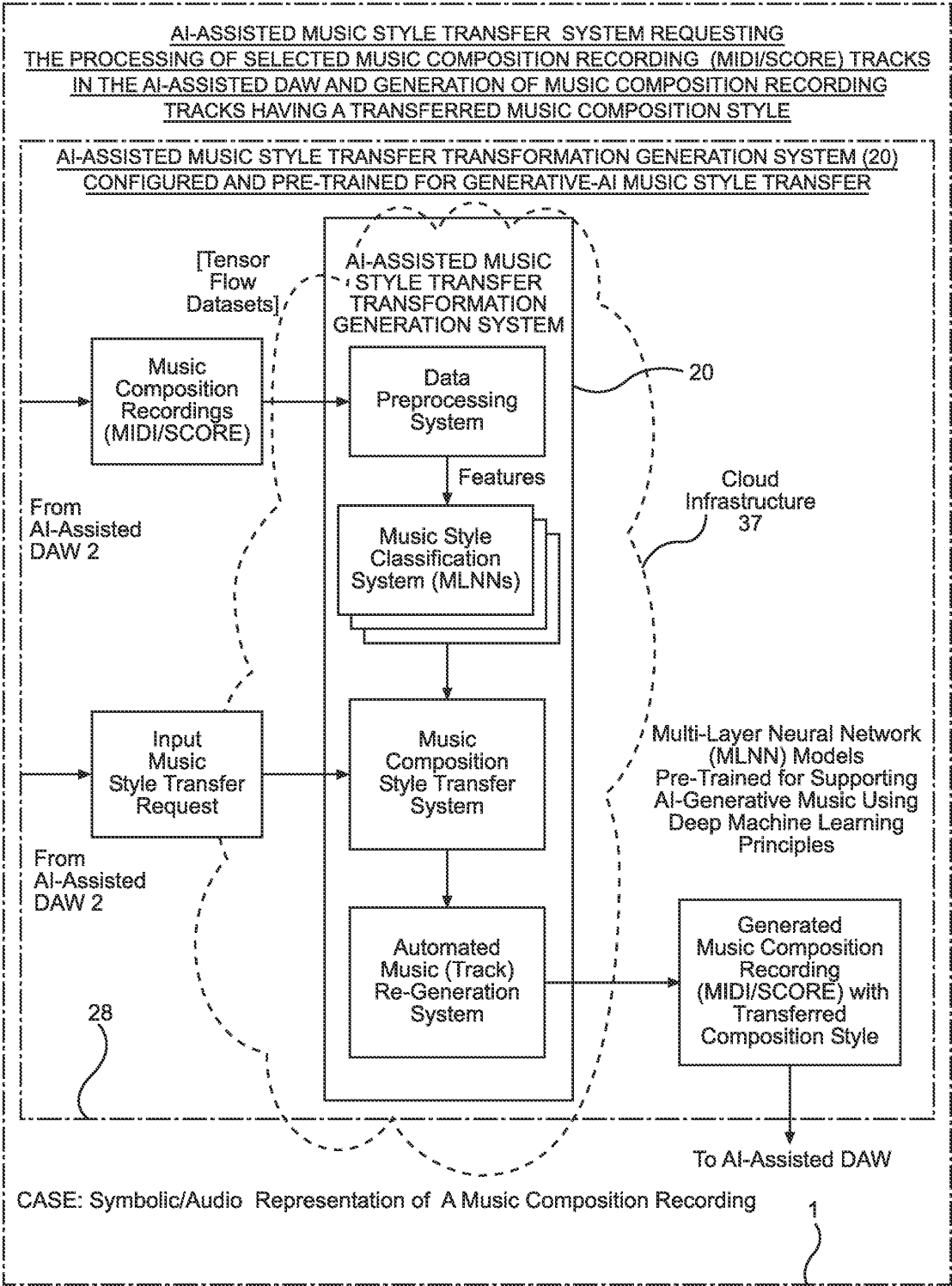


FIG. 55A

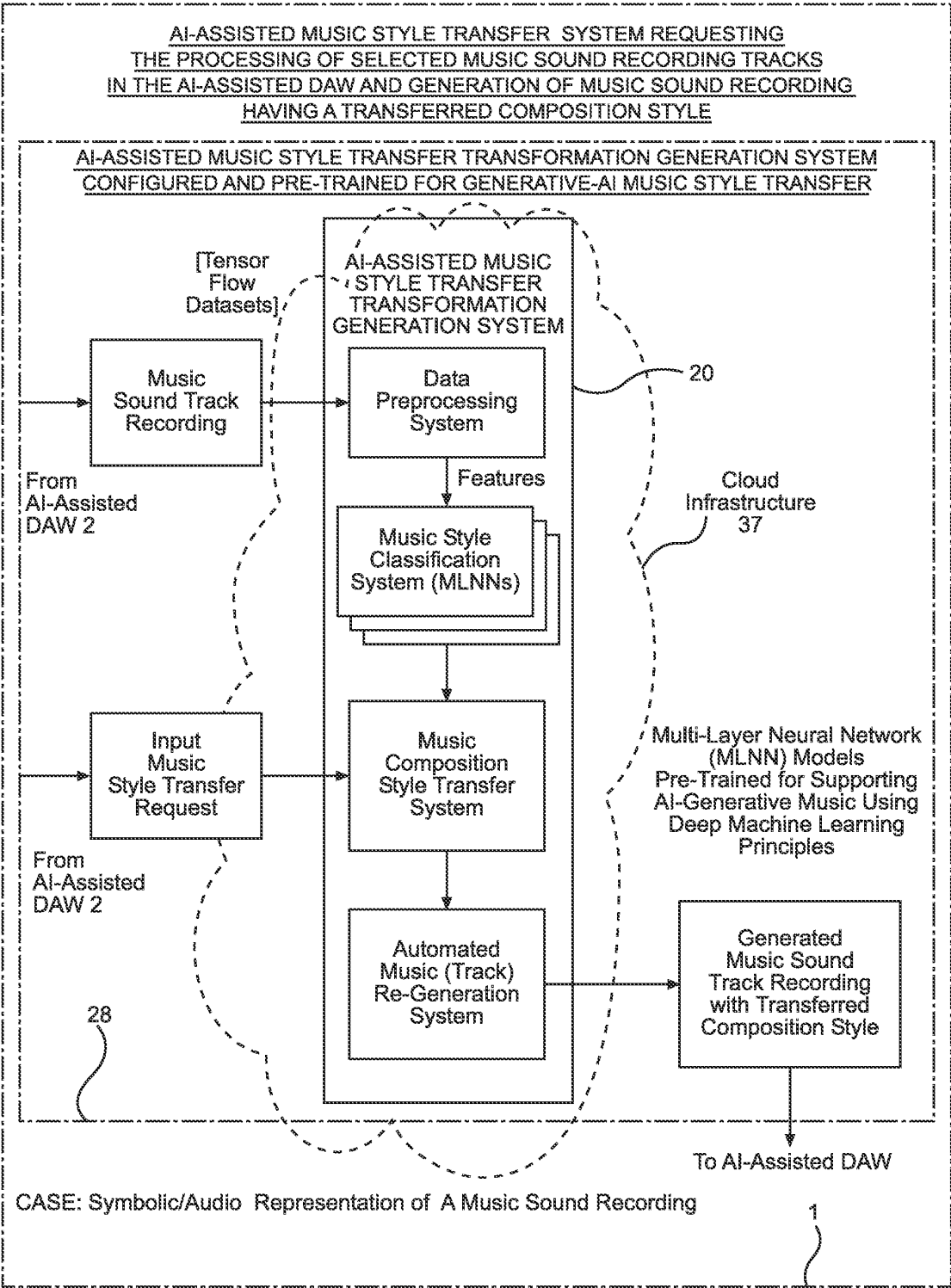


FIG. 55B

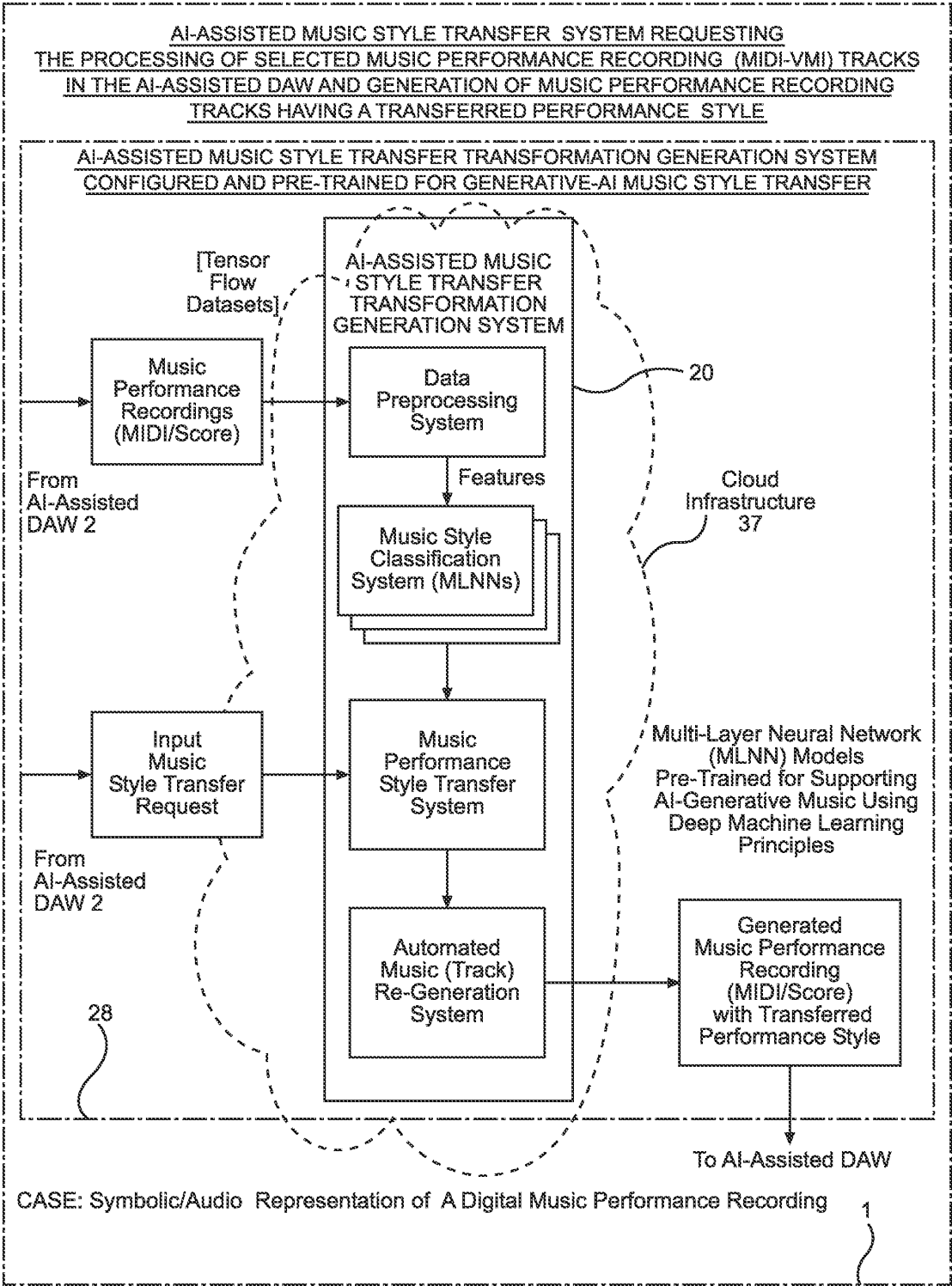
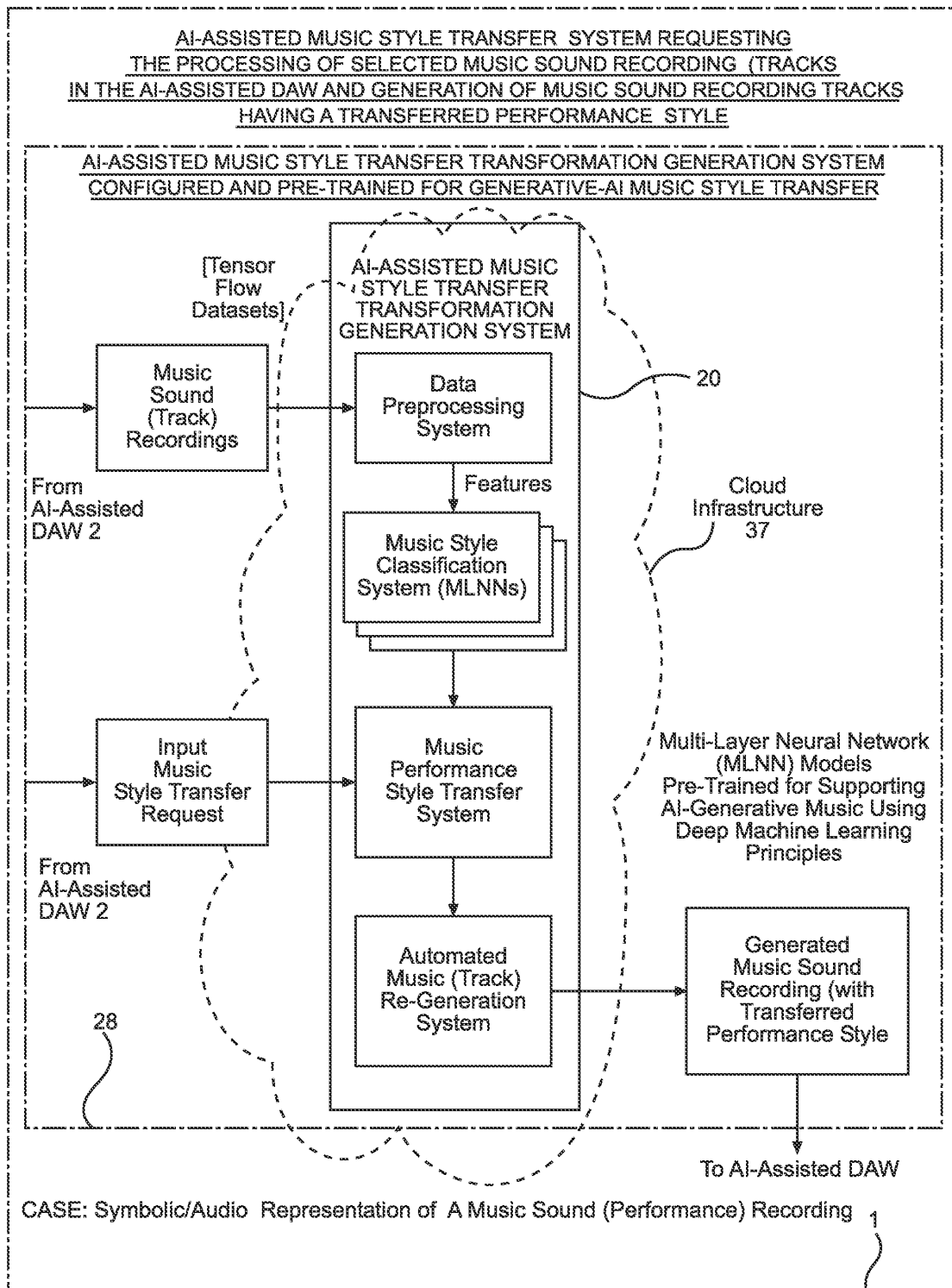


FIG. 55C



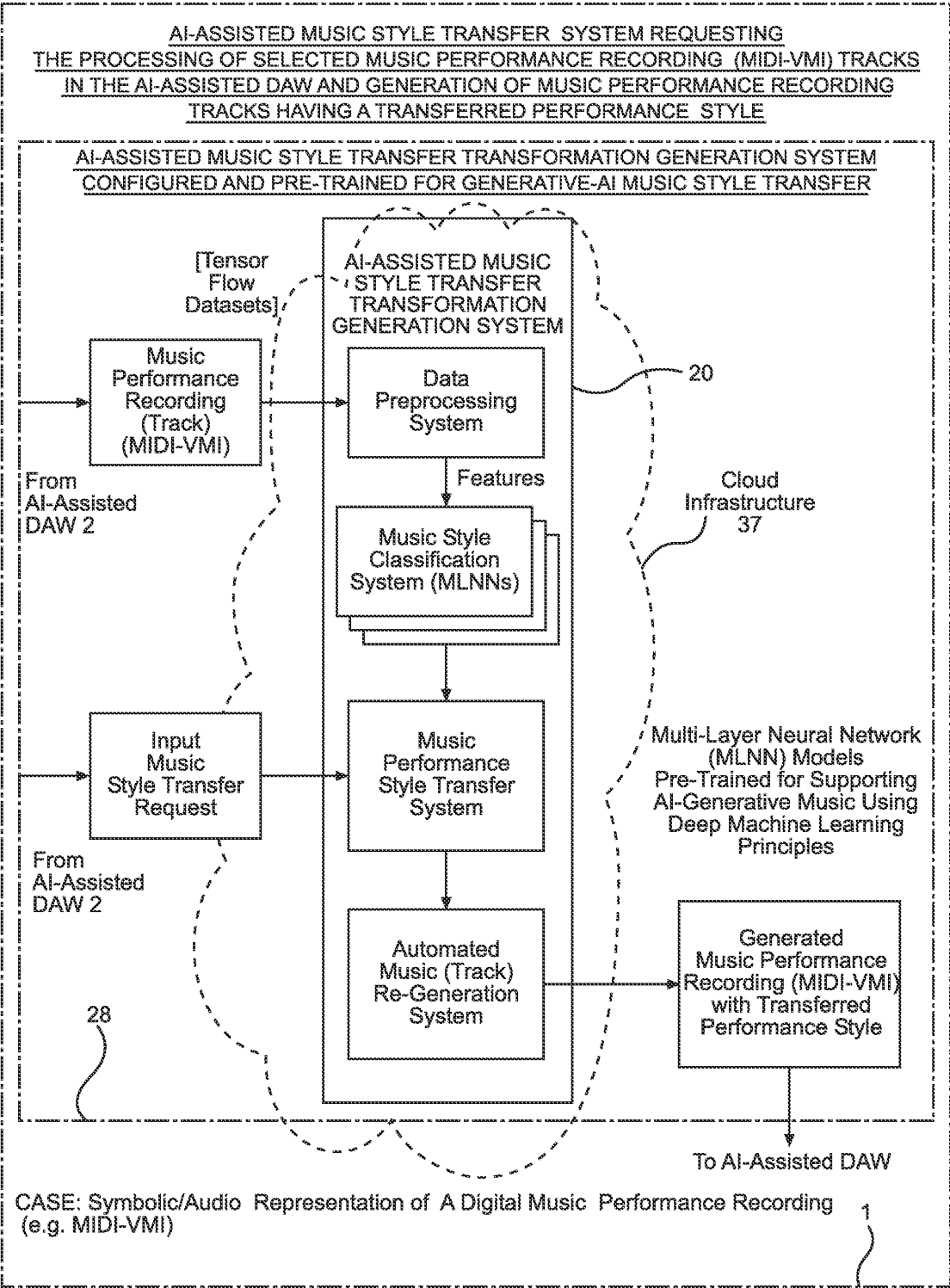


FIG. 55E

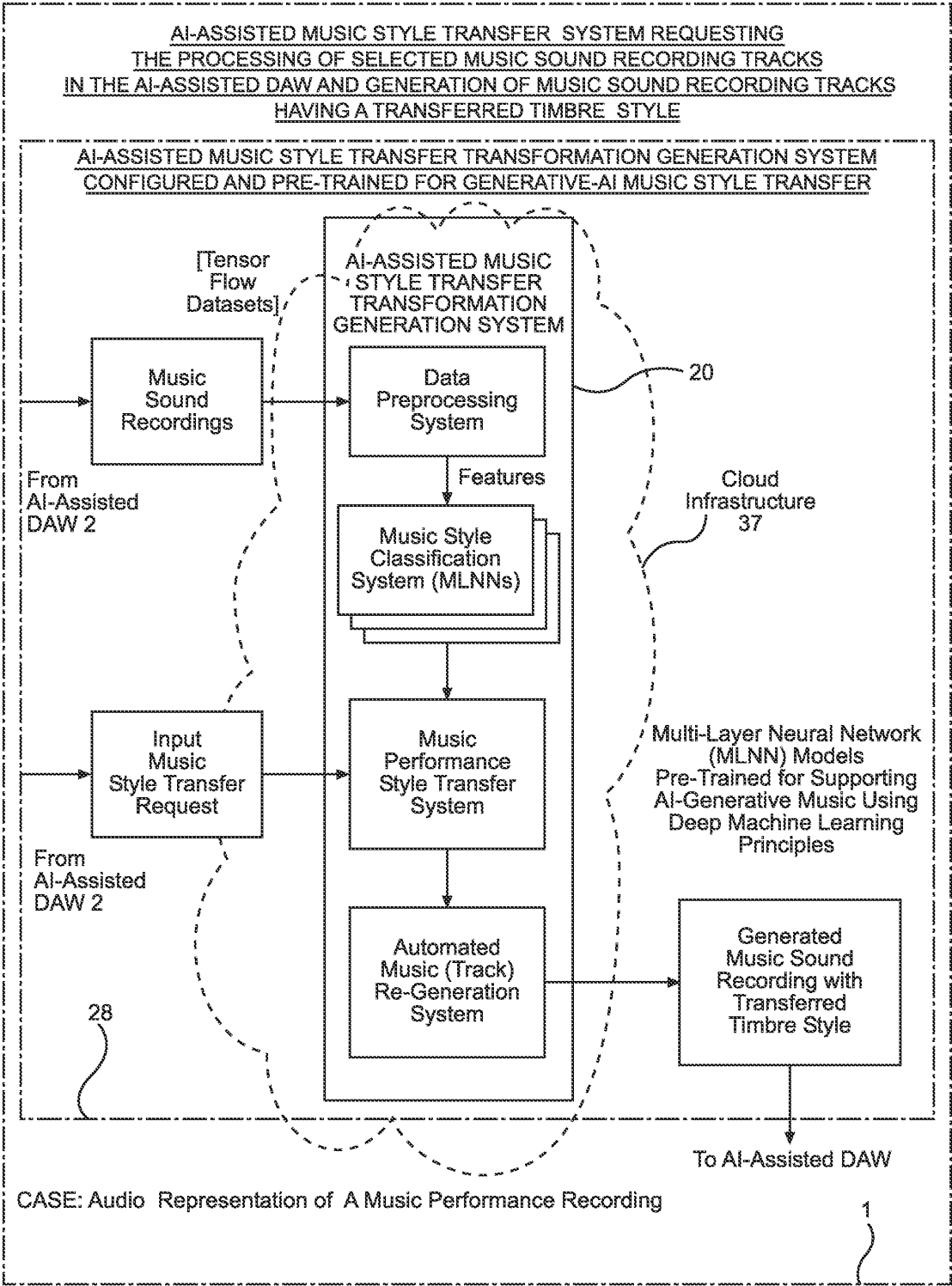


FIG. 55F

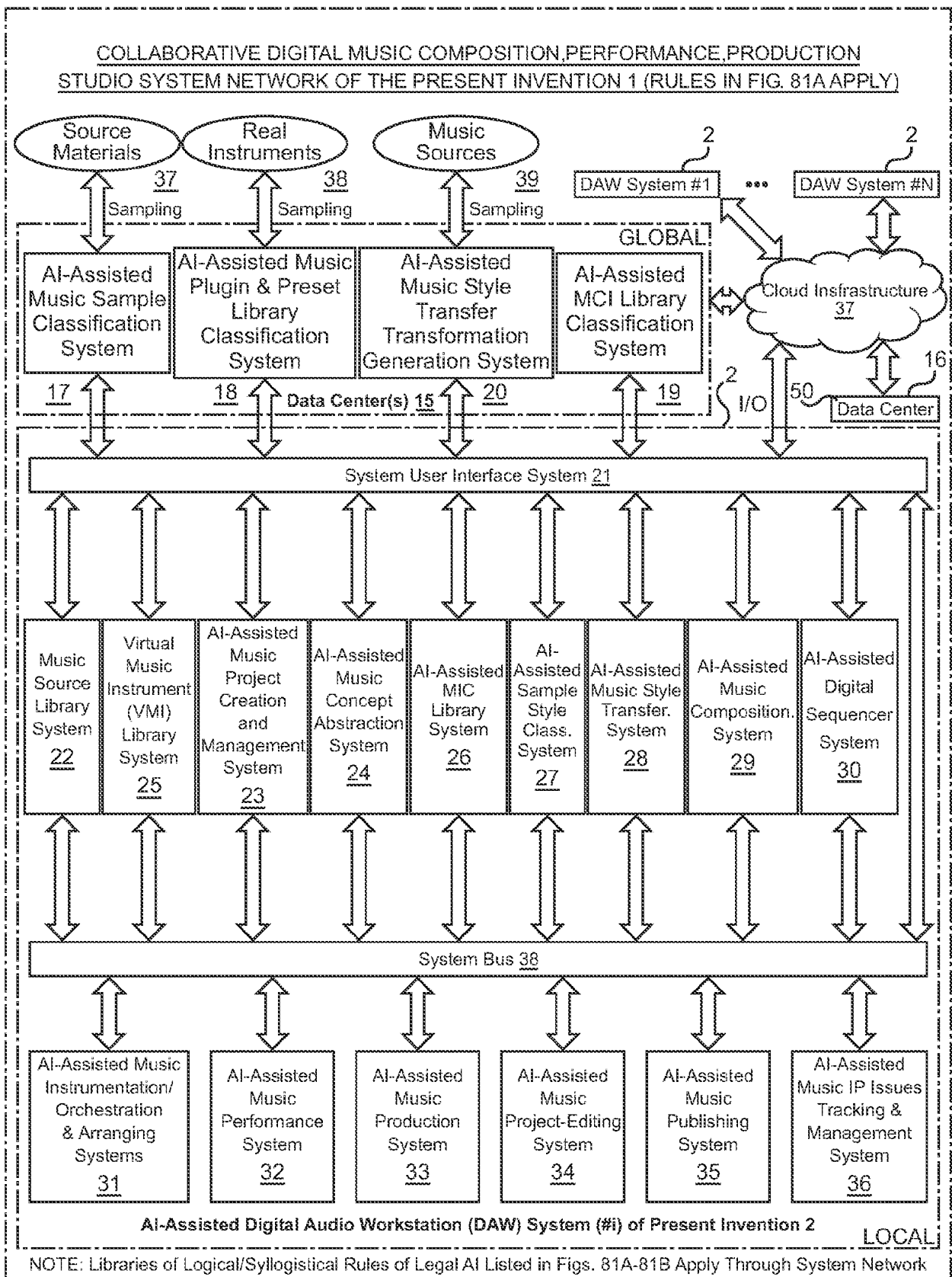


FIG. 19

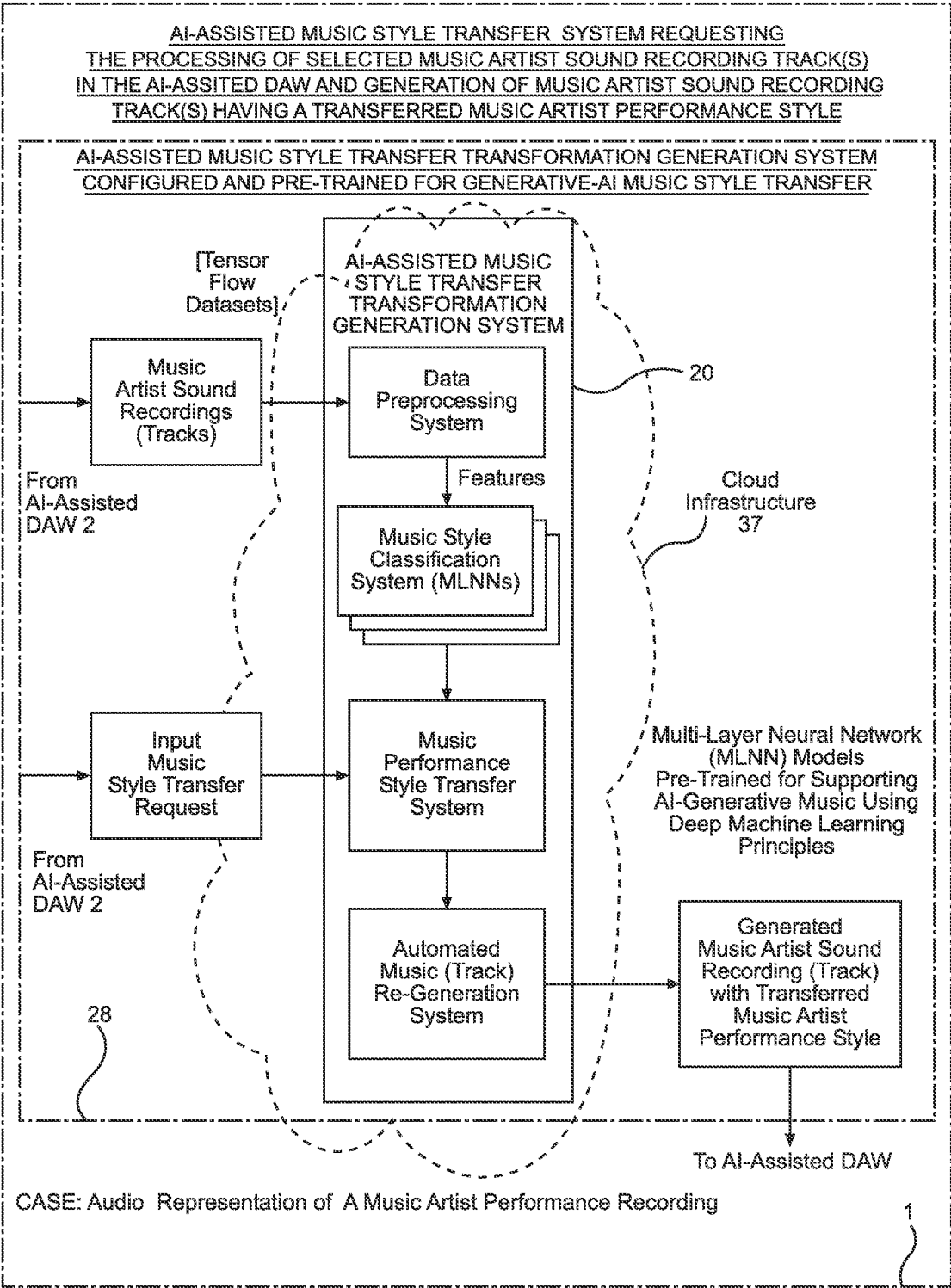


FIG. 55H

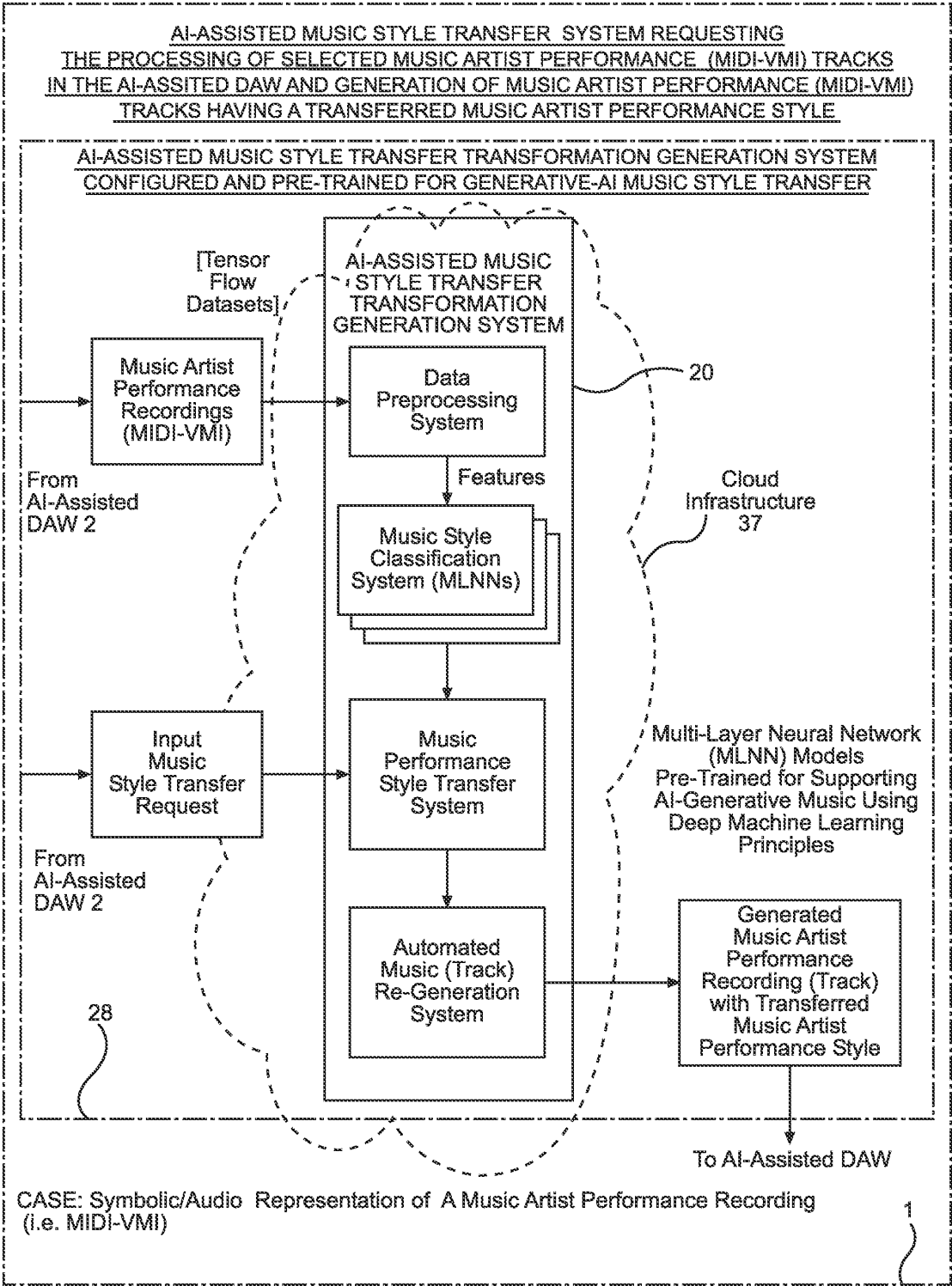


FIG. 55I

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

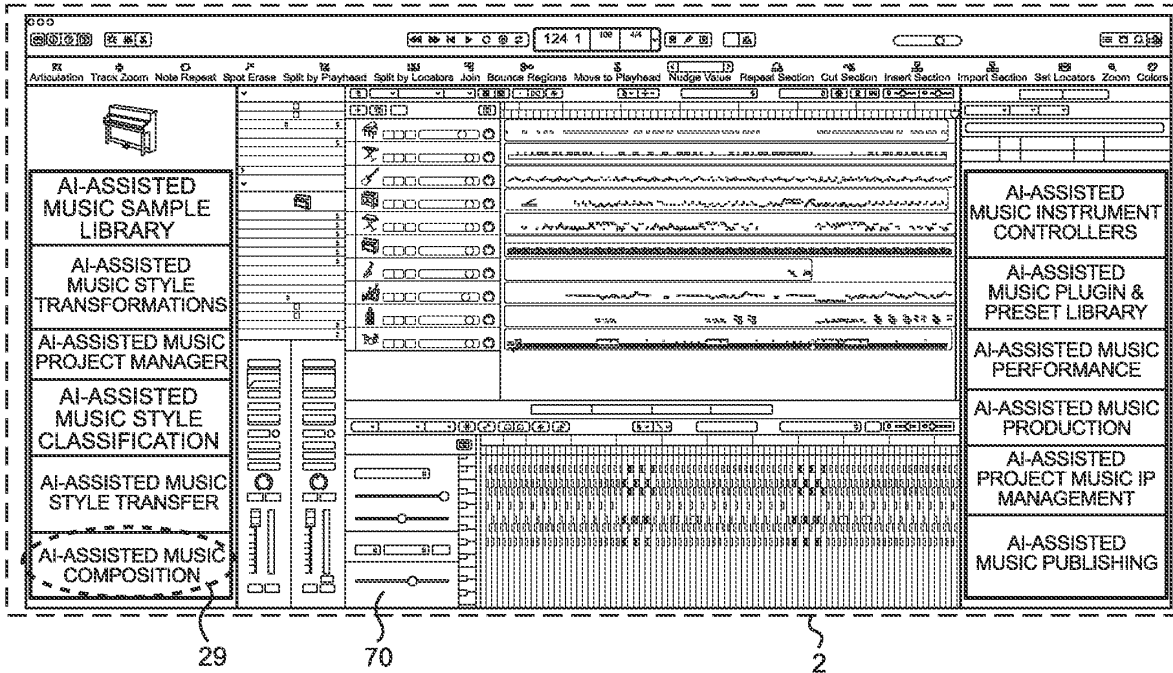


FIG. 56

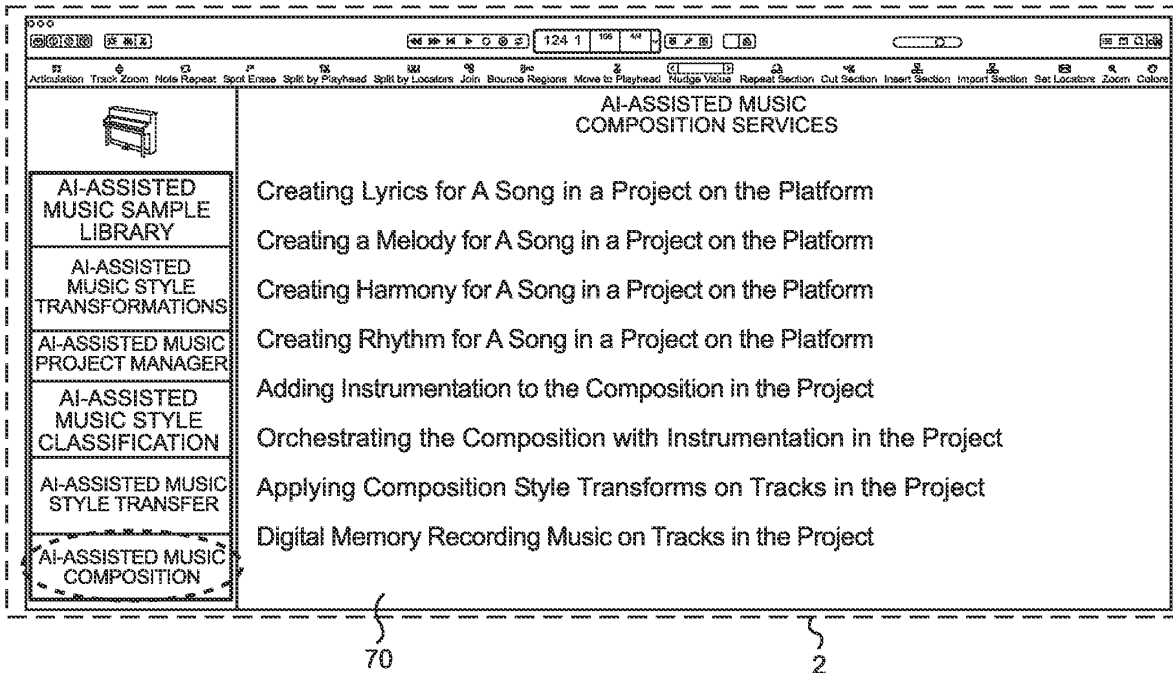


FIG. 56A

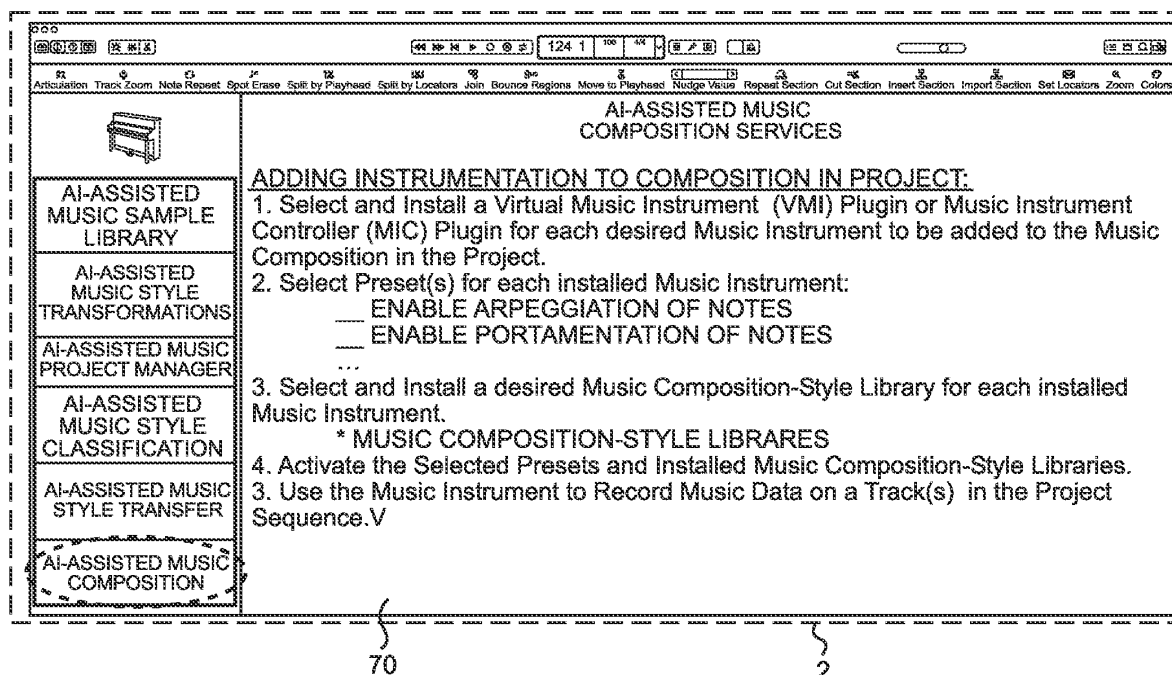


FIG. 56B

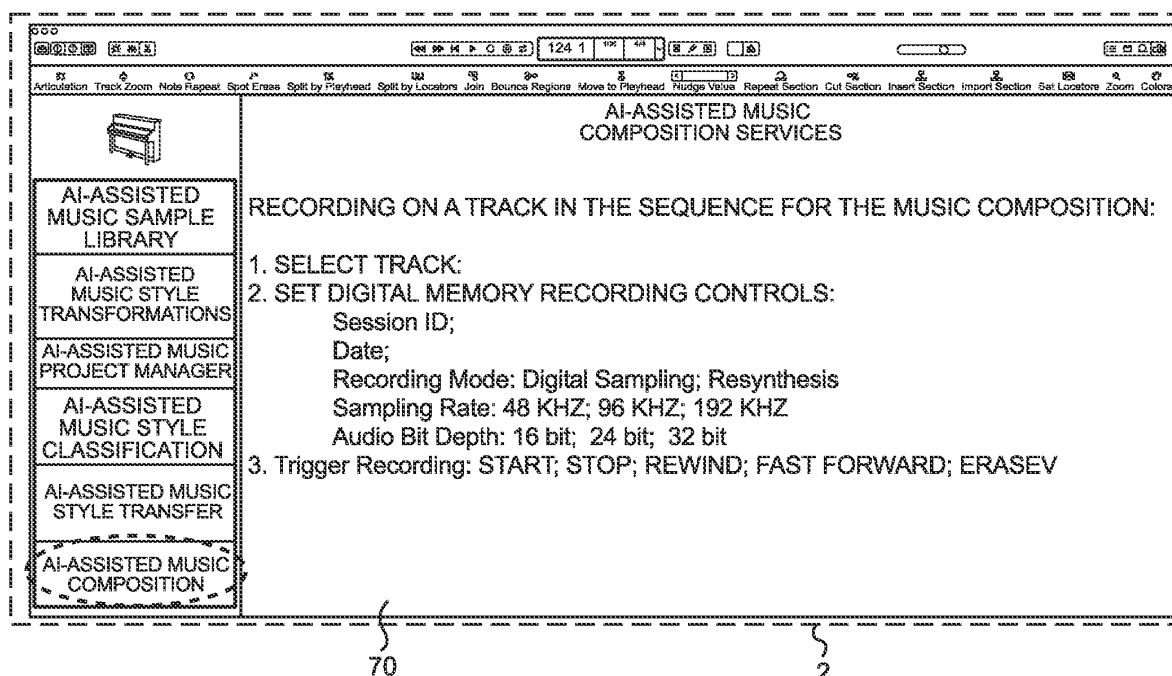


FIG. 56C

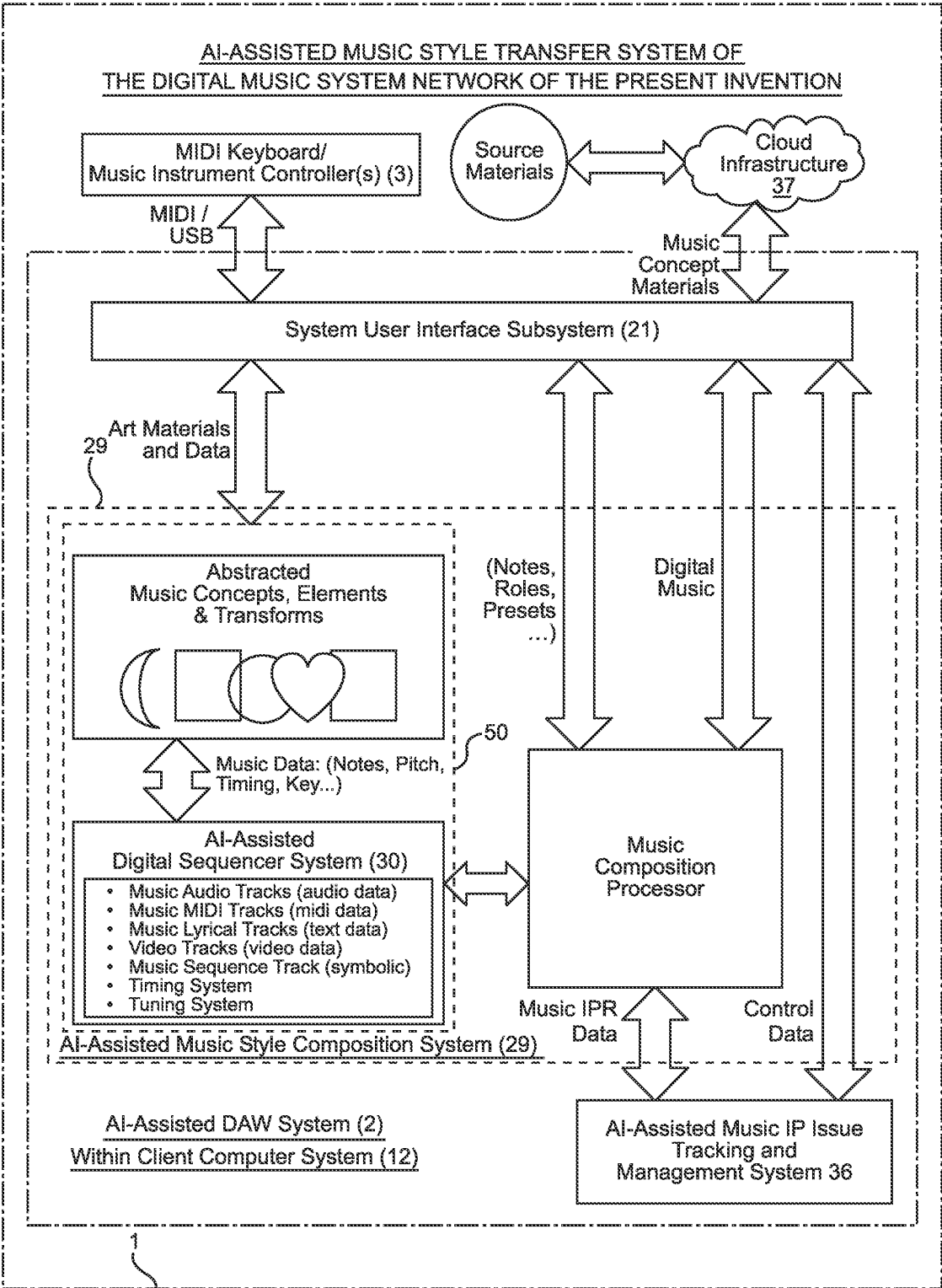


FIG. 57

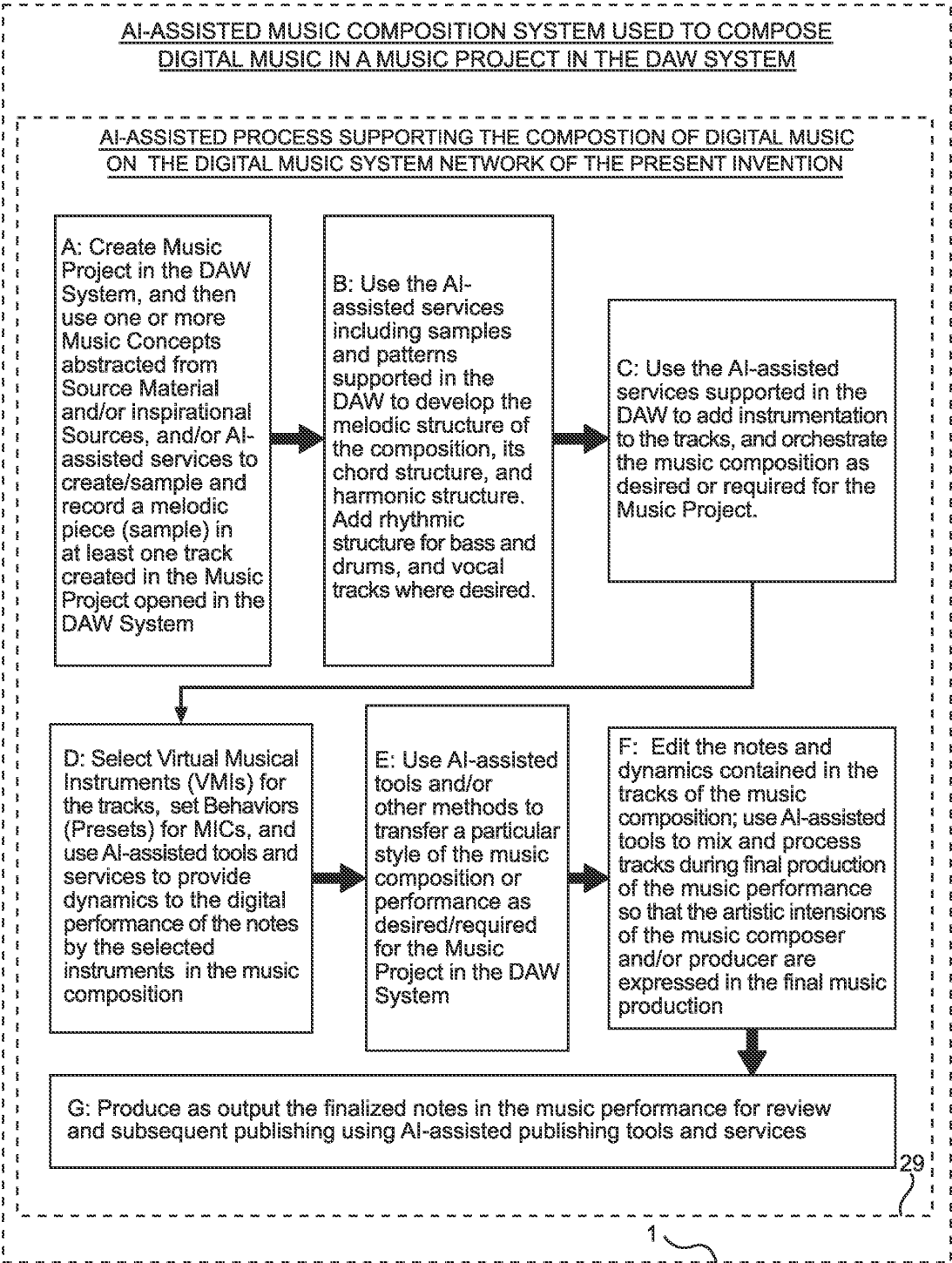
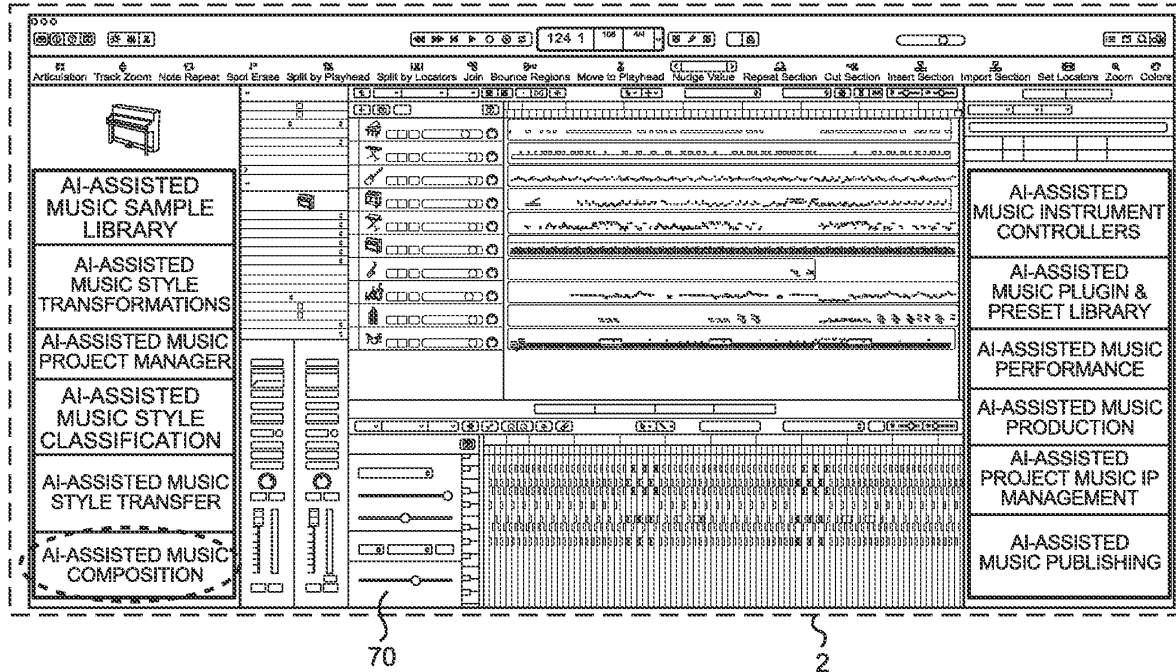
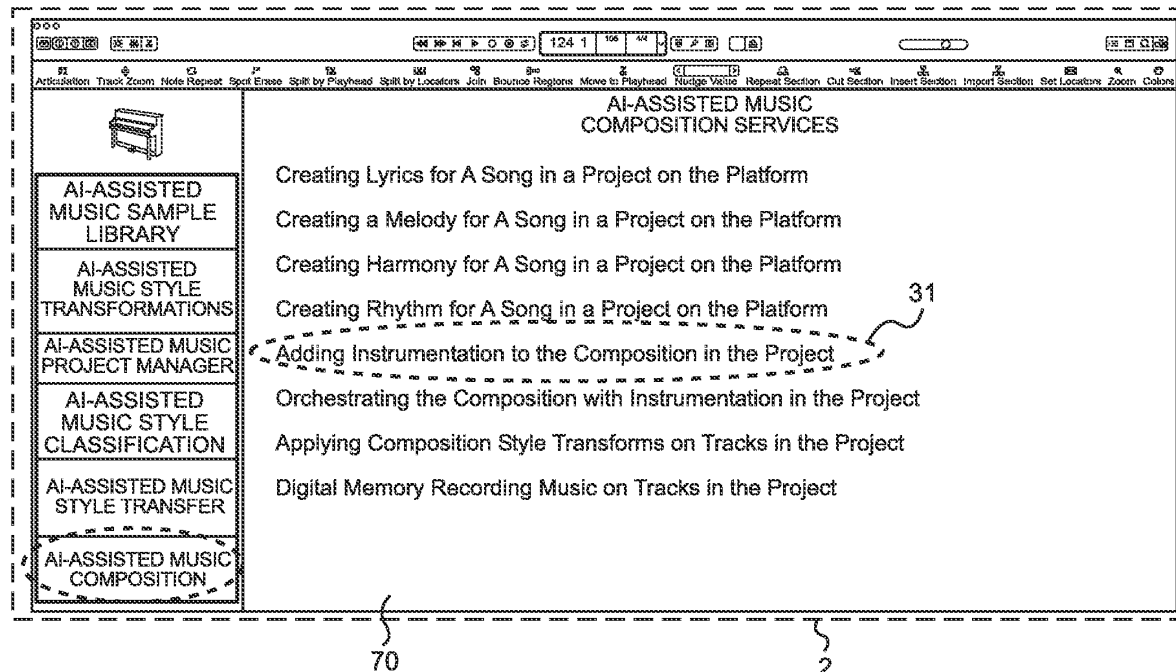


FIG. 58

**ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION**

**FIG. 59****FIG. 59A**

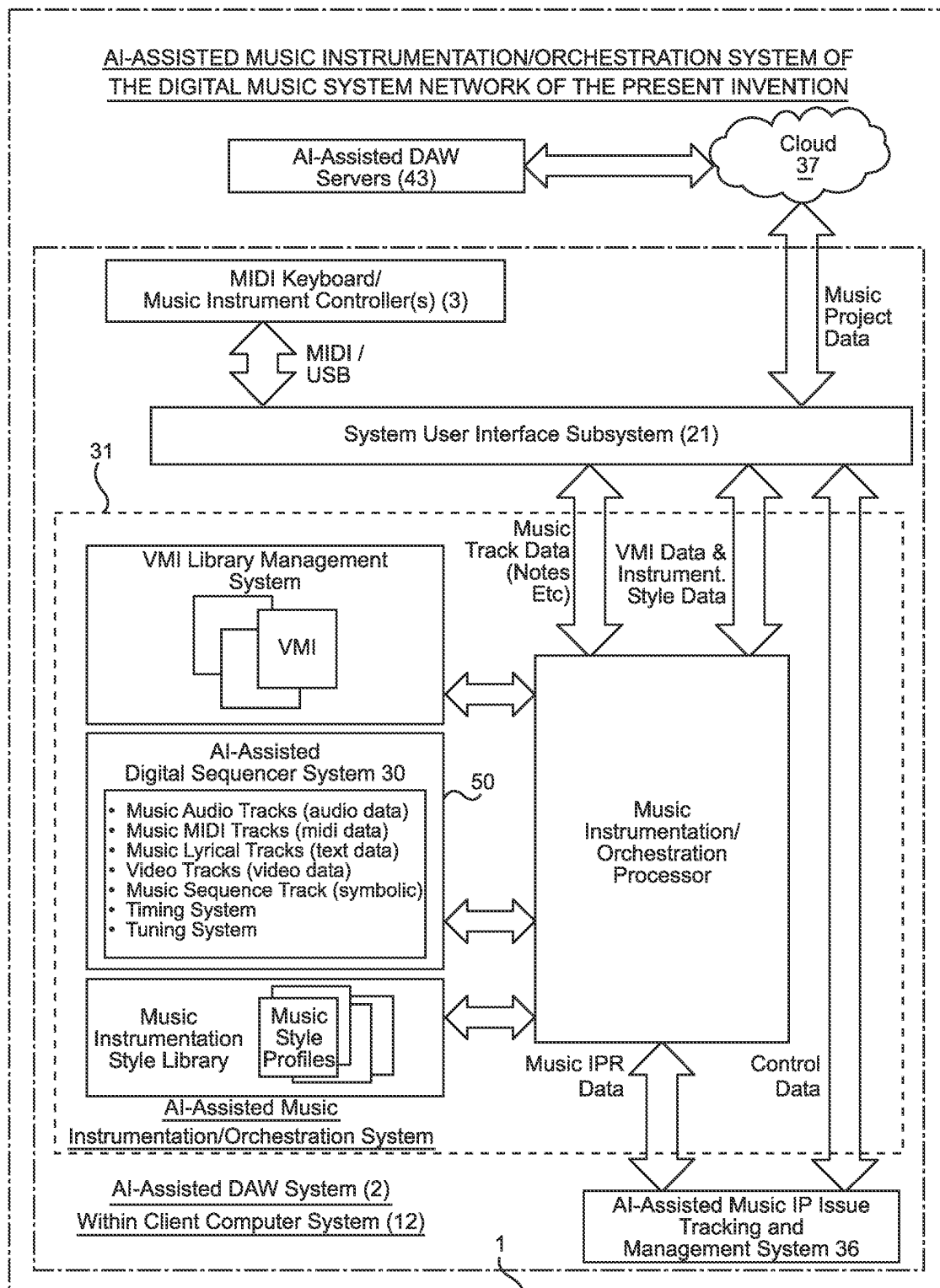


FIG. 60

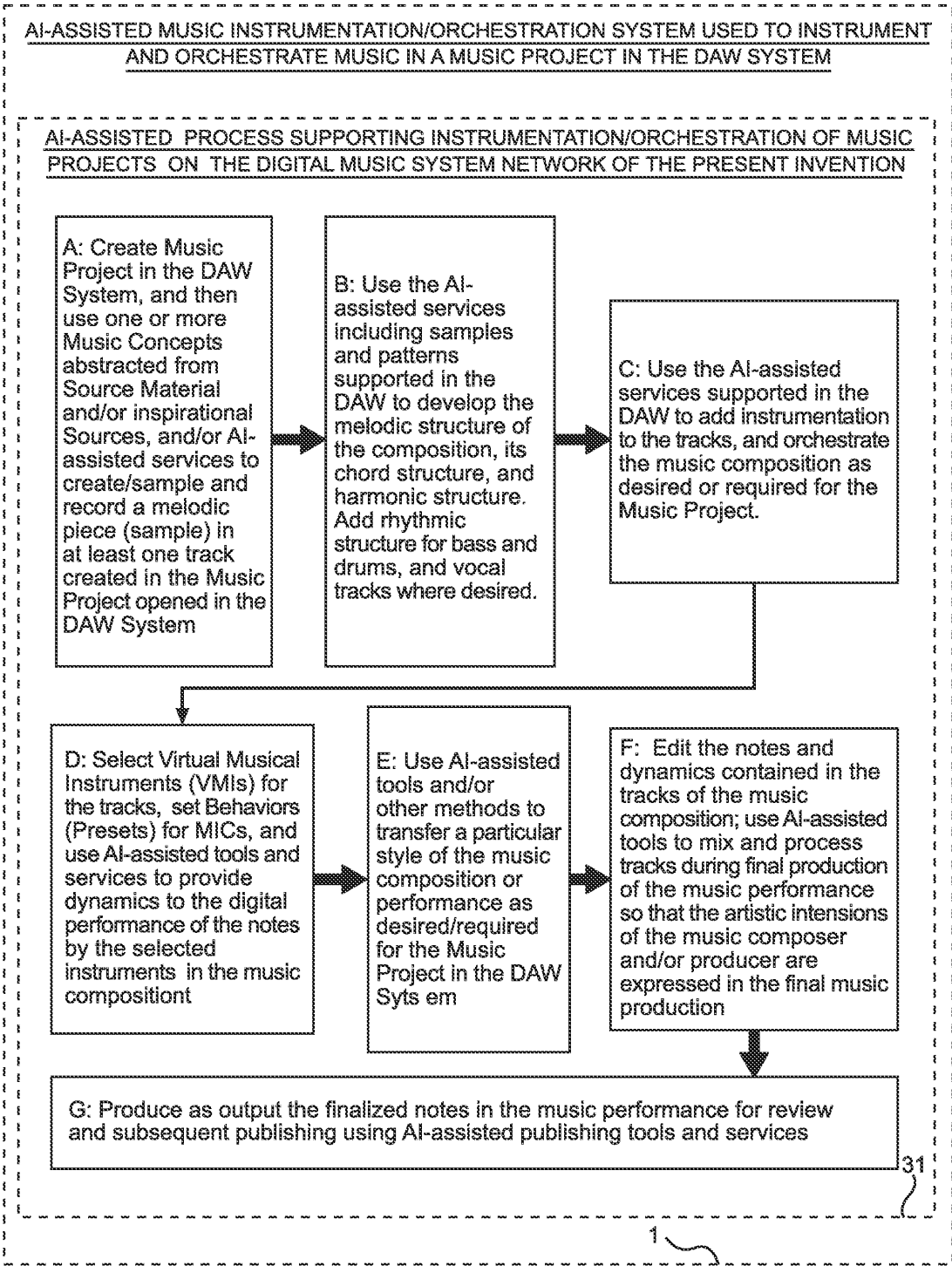


FIG. 61

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

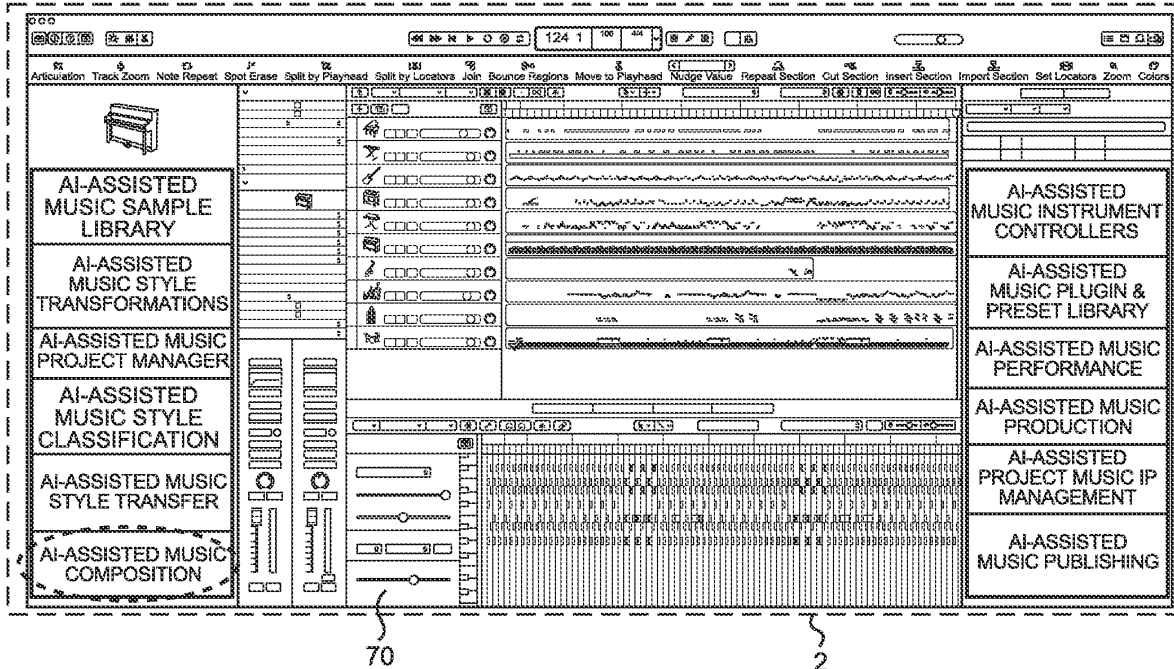


FIG. 62

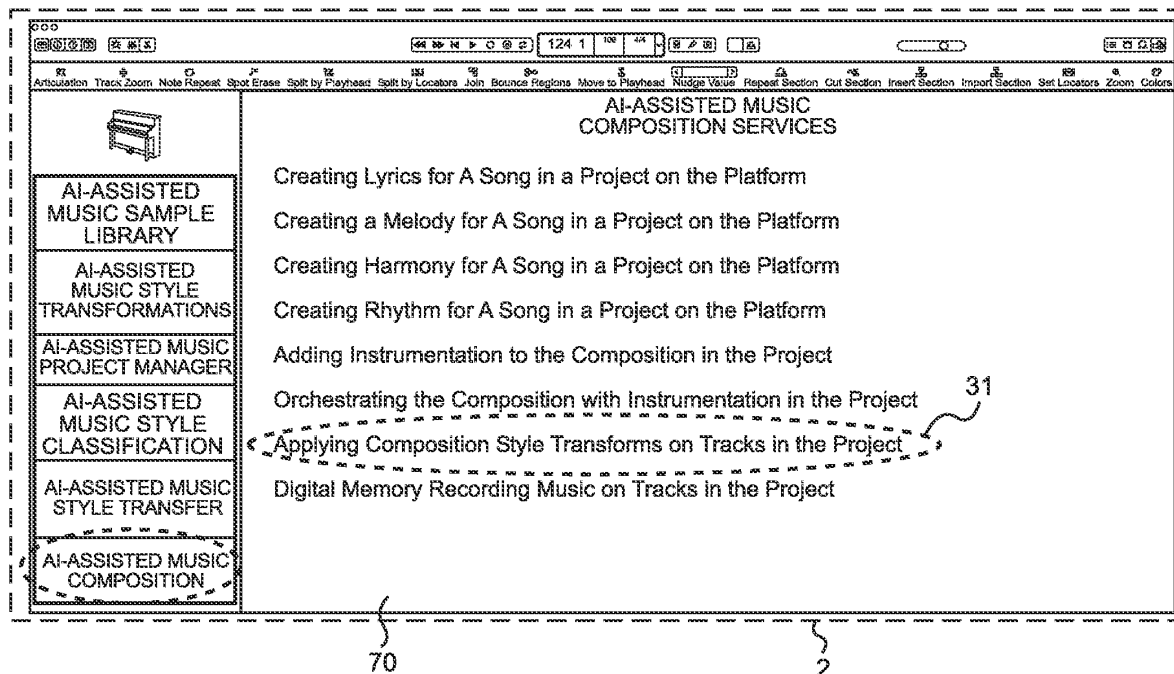


FIG. 62A

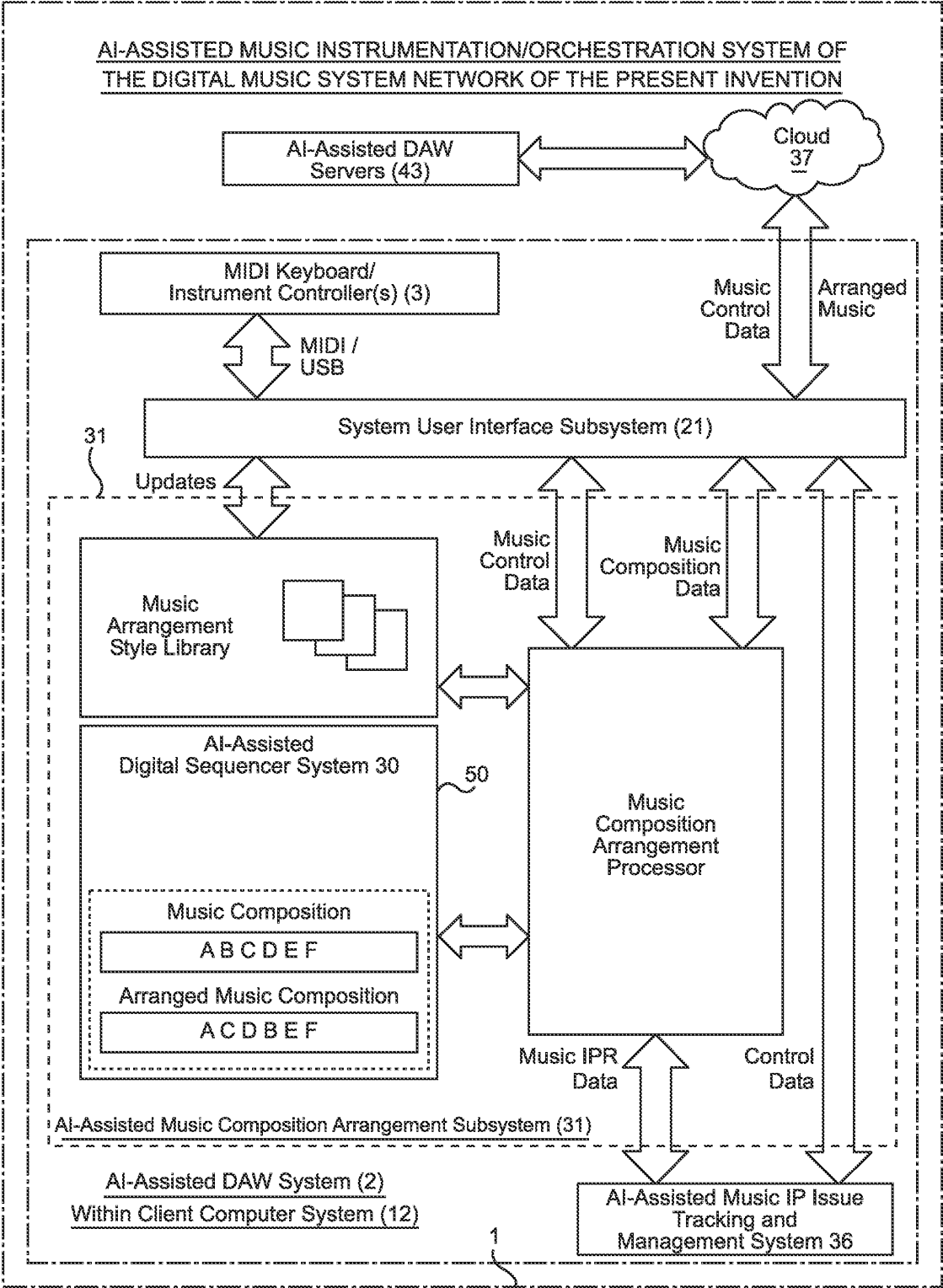


FIG. 63

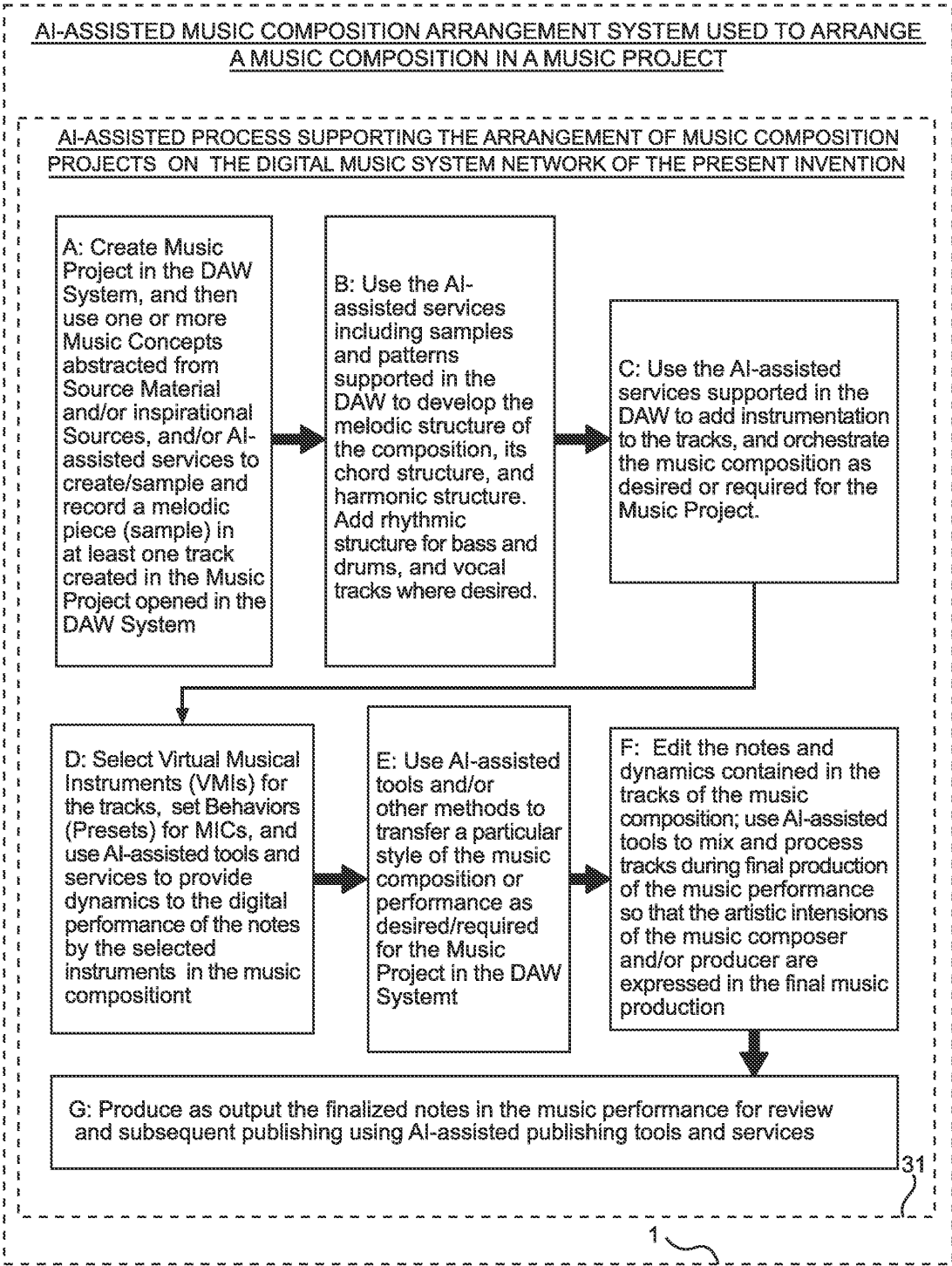


FIG. 64

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

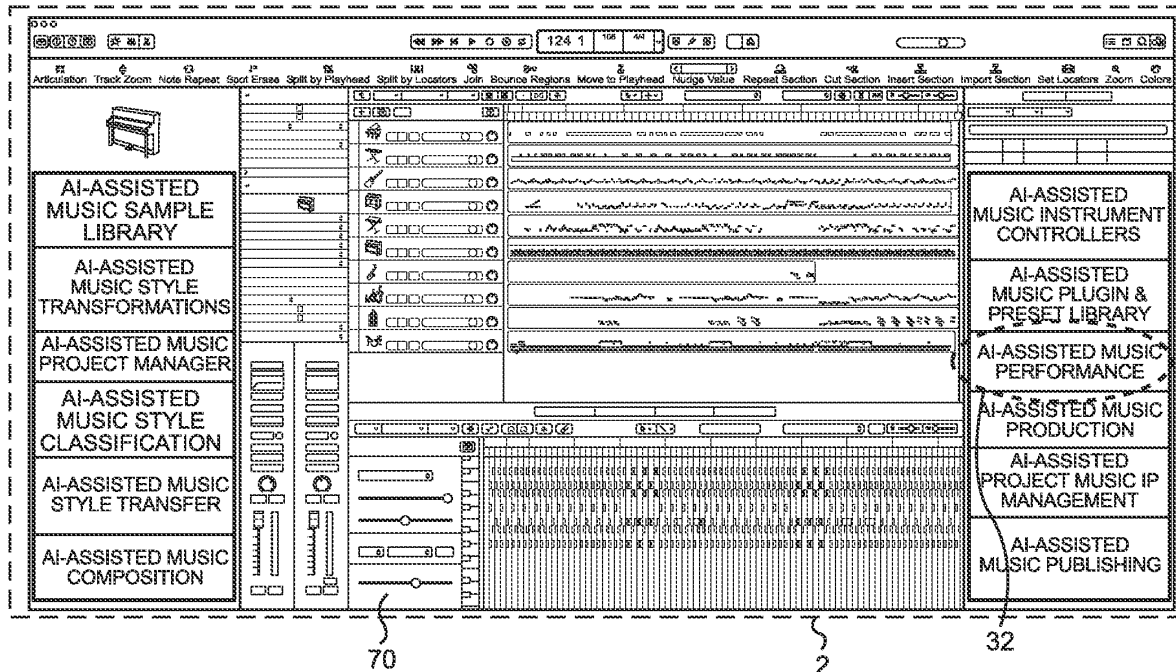


FIG. 65

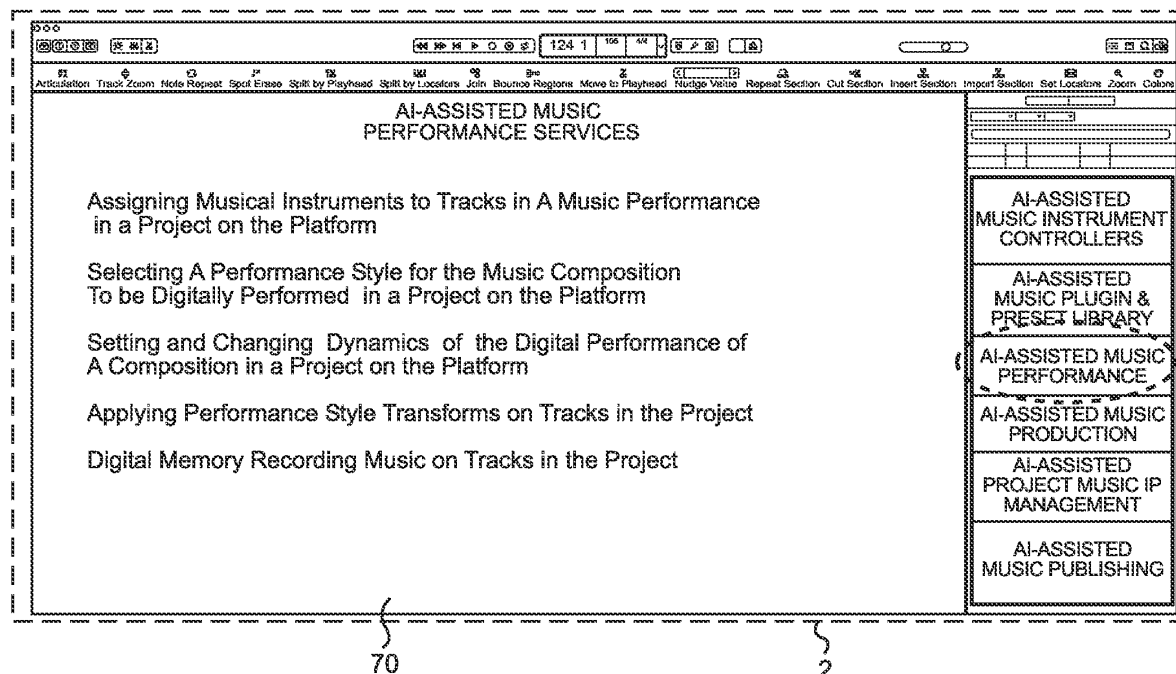


FIG. 65A

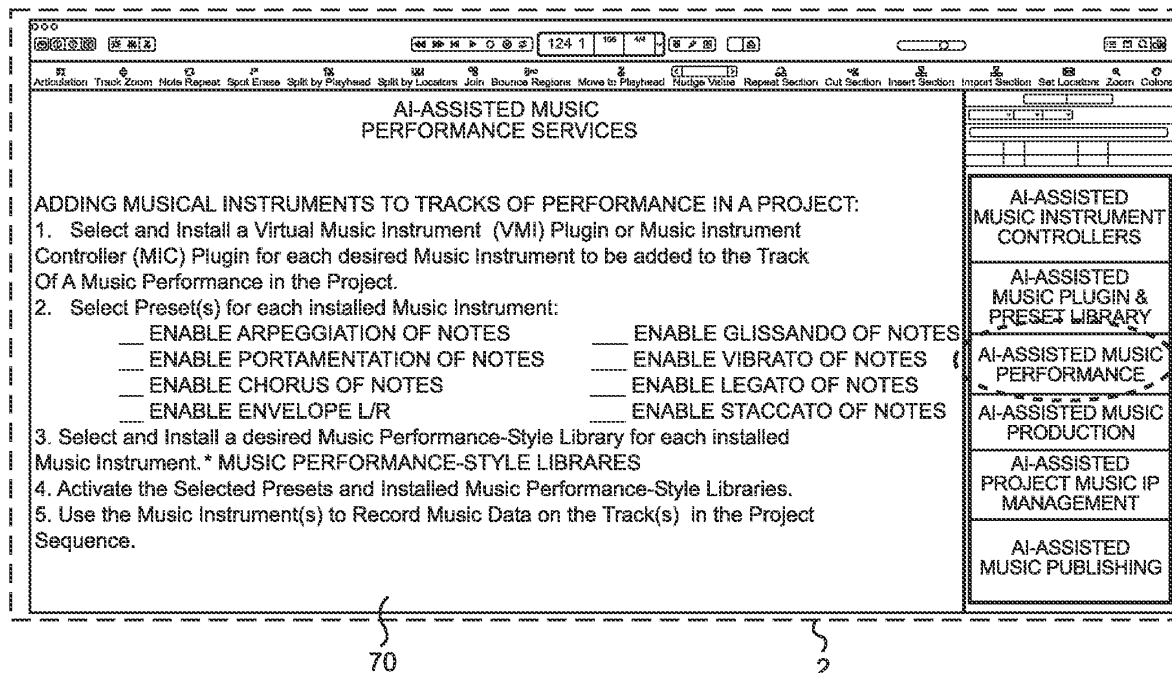


FIG. 65B

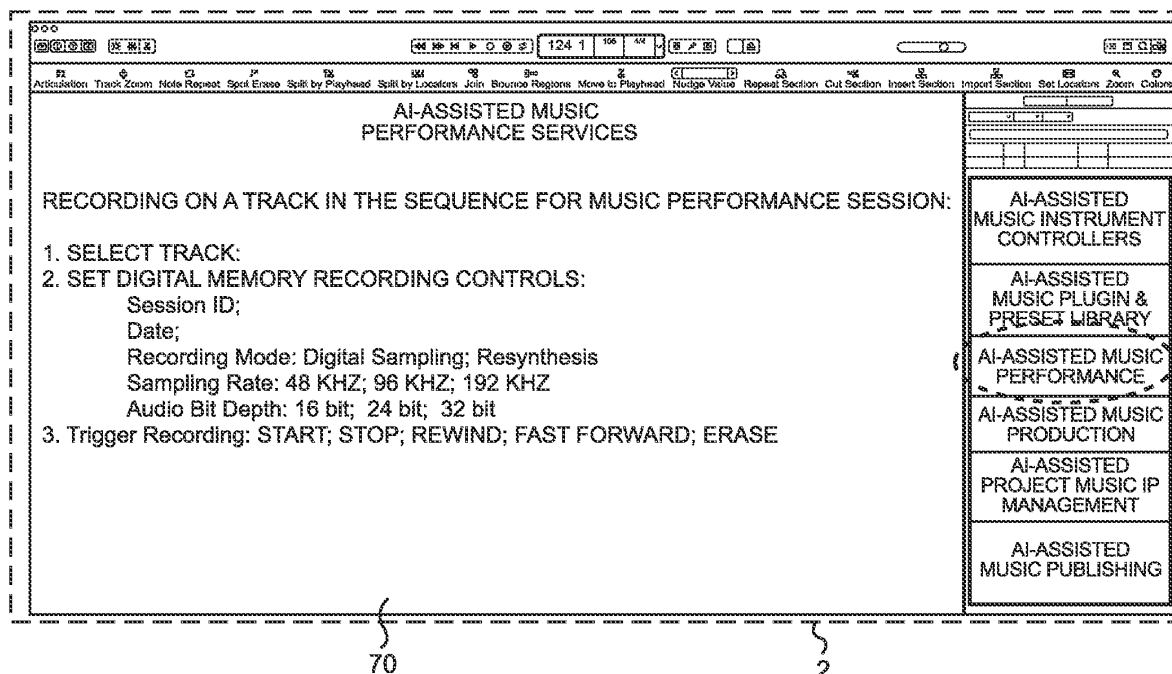


FIG. 65C

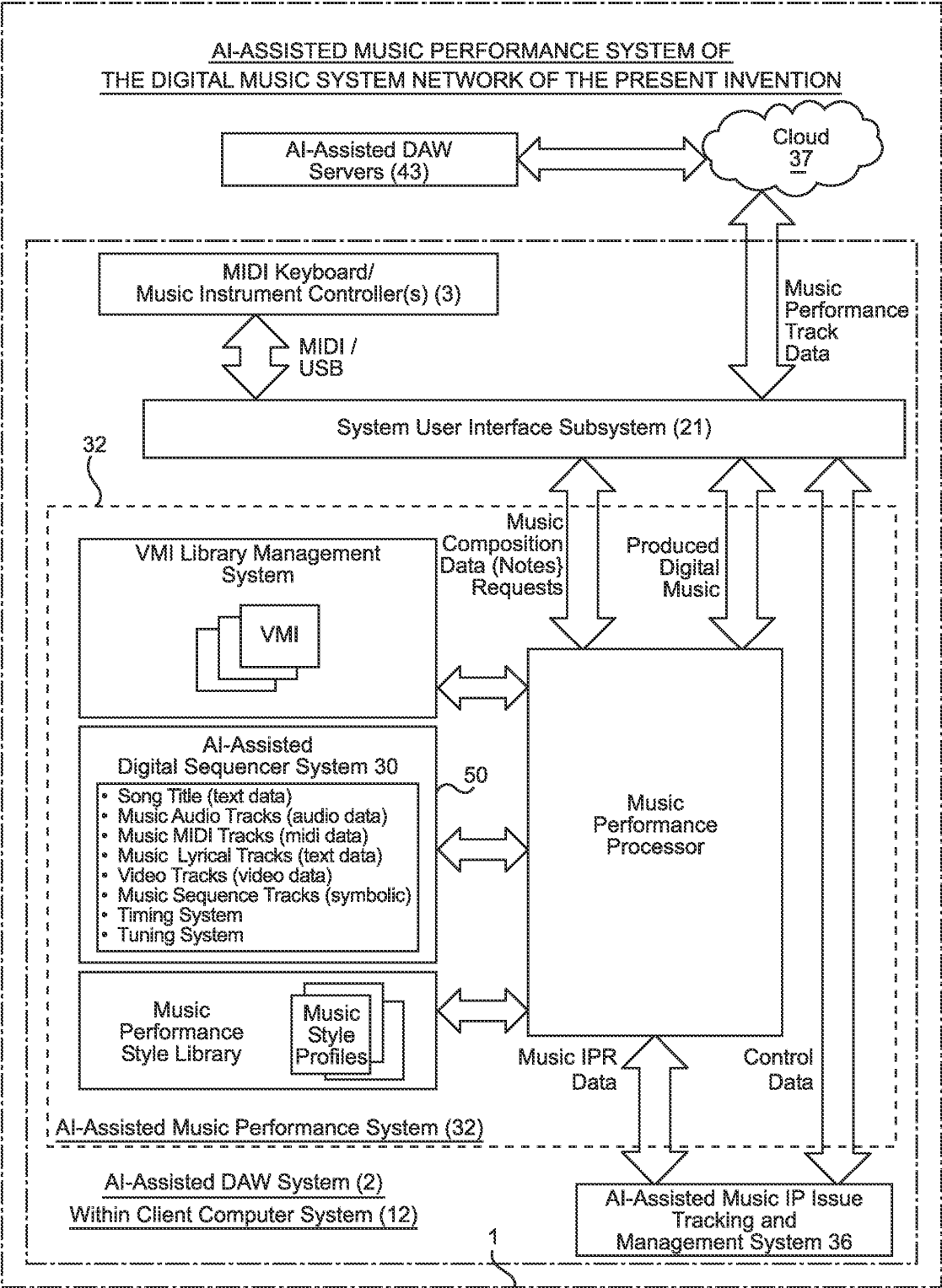


FIG. 66

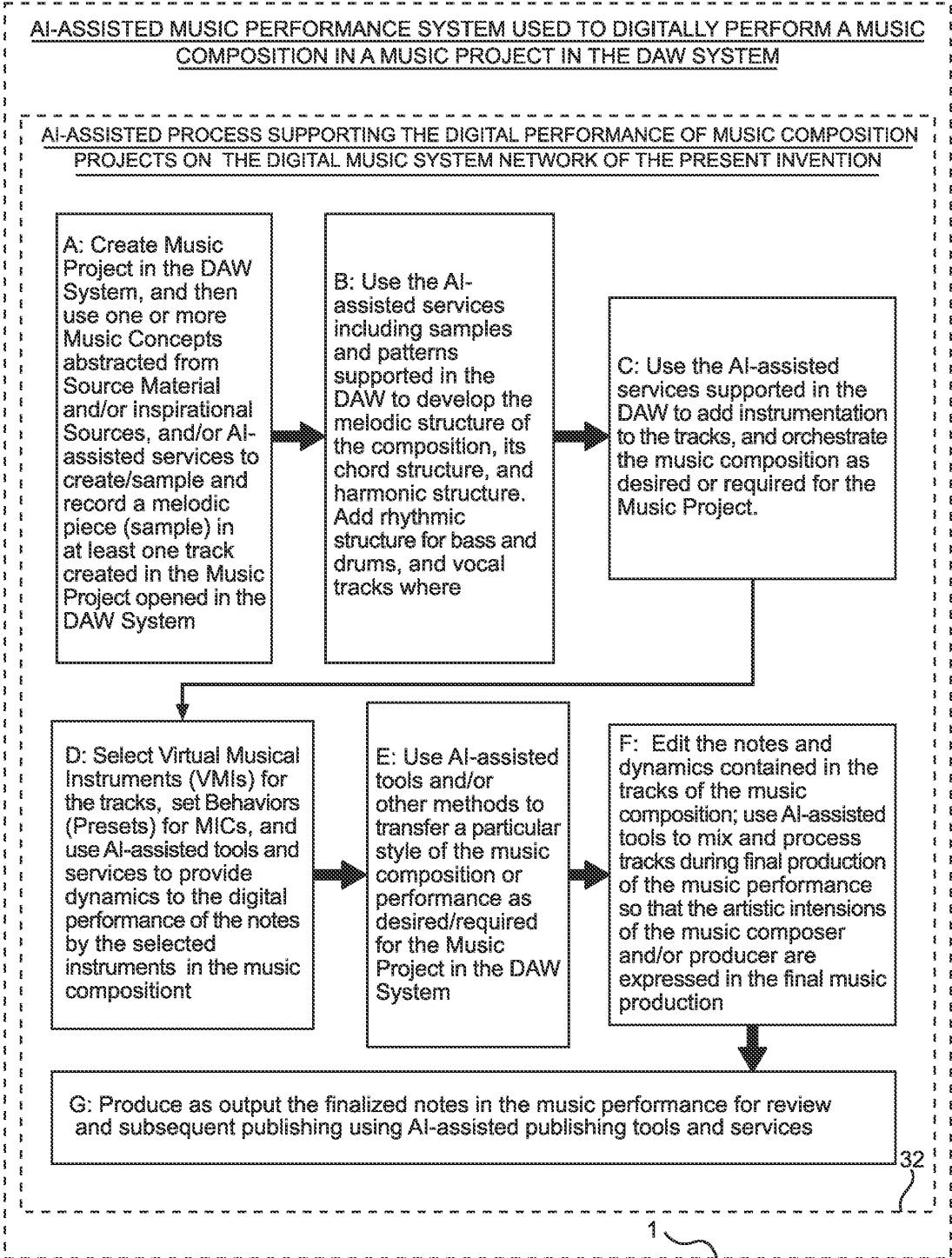


FIG. 67

Method of Generating A Digital Performance of A Music Composition on
A Digital Audio Workstation (DAW) Supported By A Collaborative Musical Model (CMM)

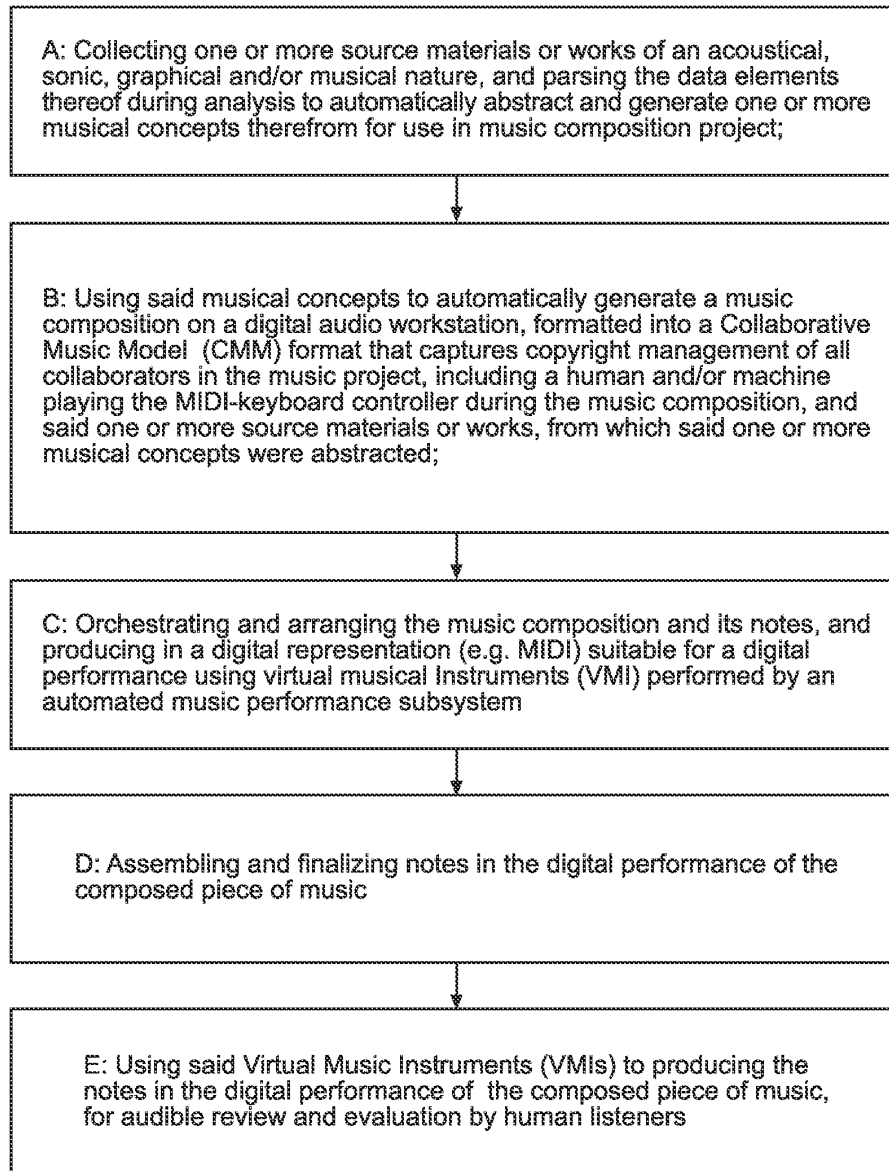


FIG. 68

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

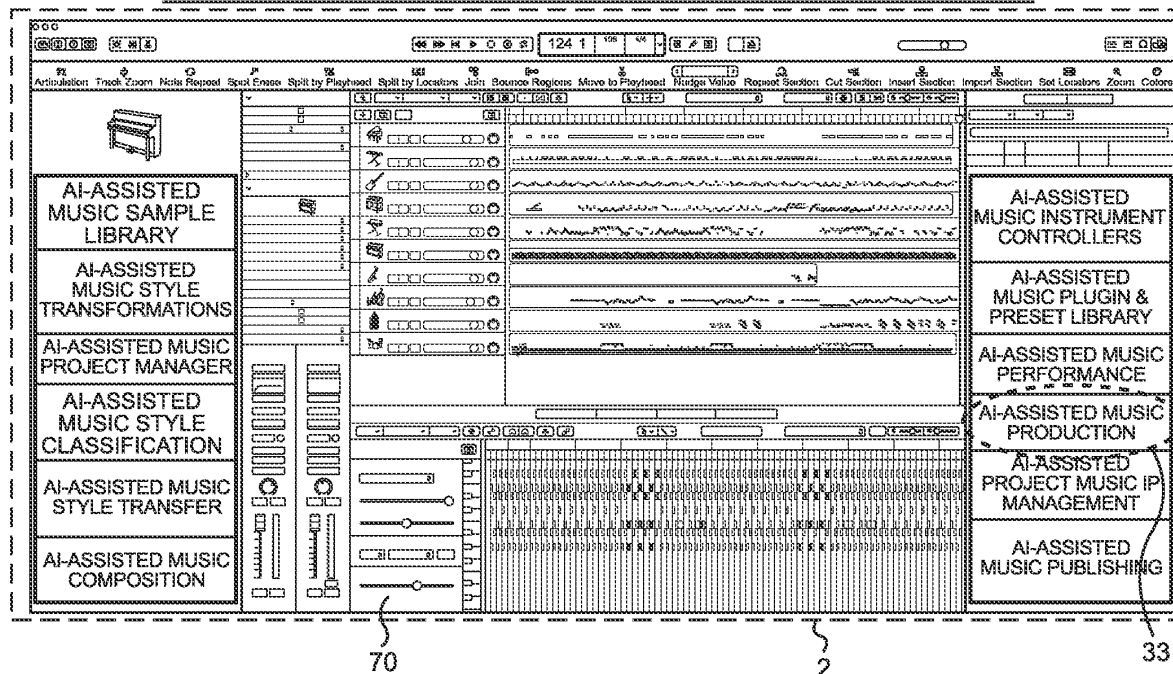


FIG. 69

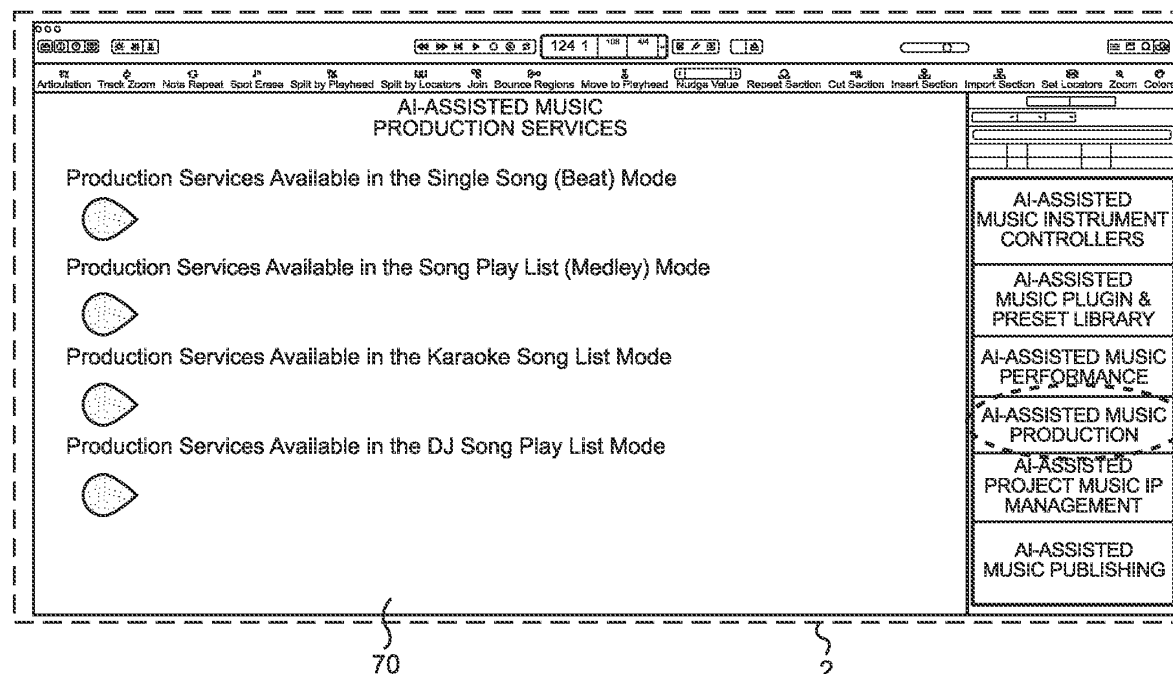


FIG. 69A

**ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION**

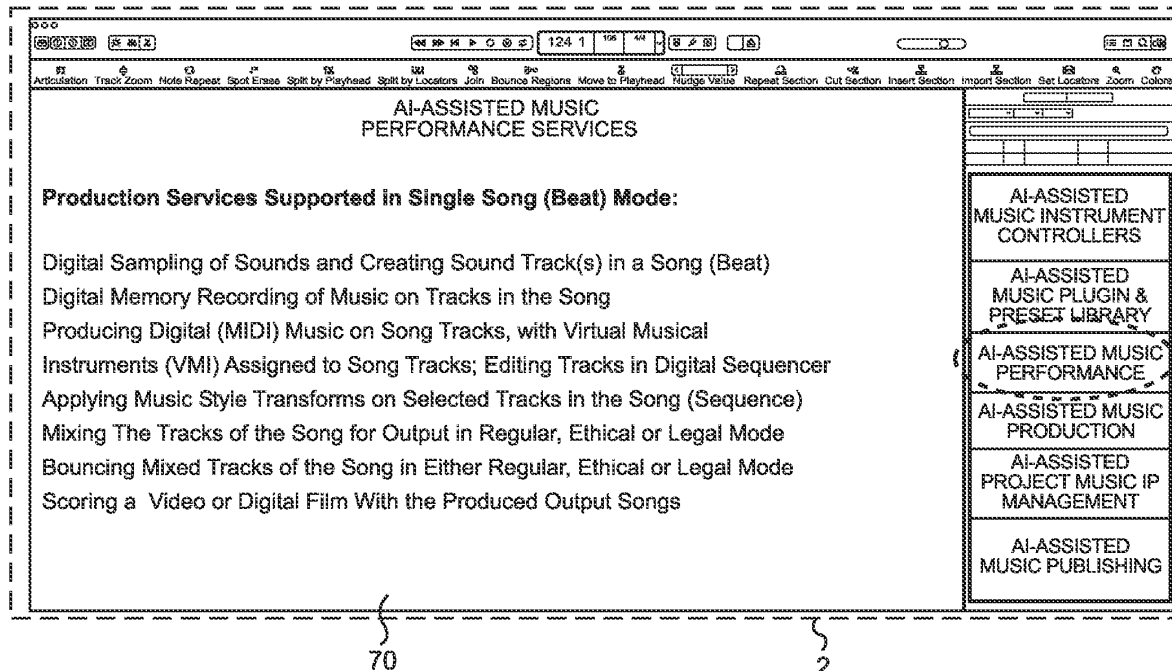


FIG. 69B

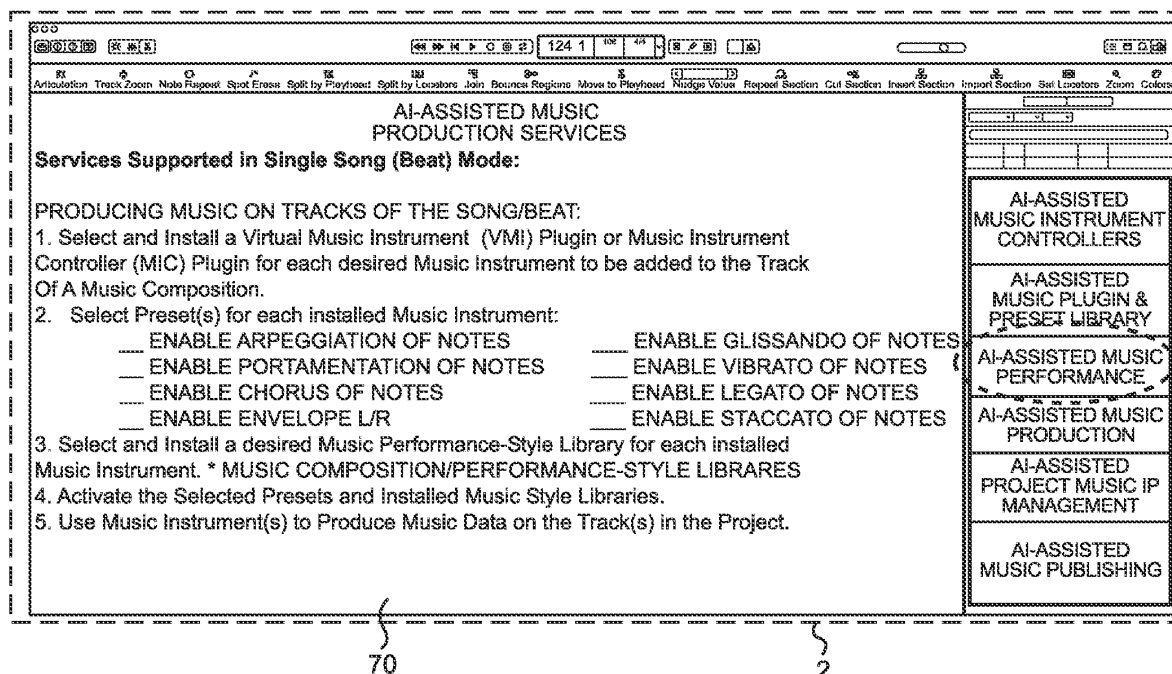


FIG. 69B1

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

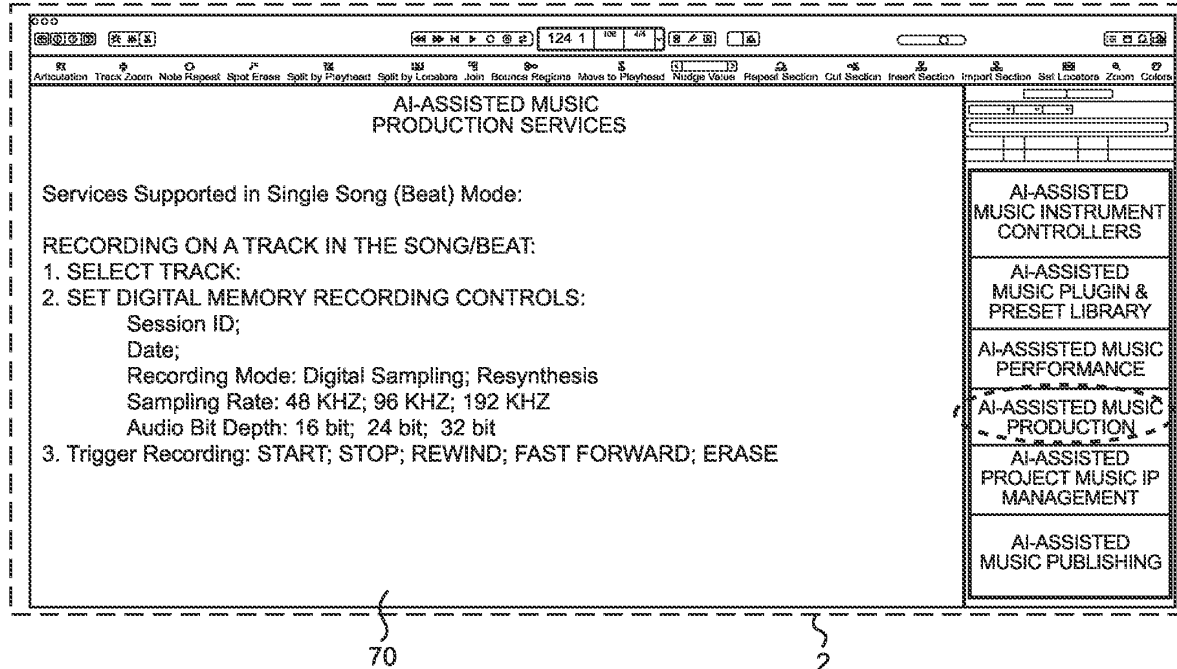
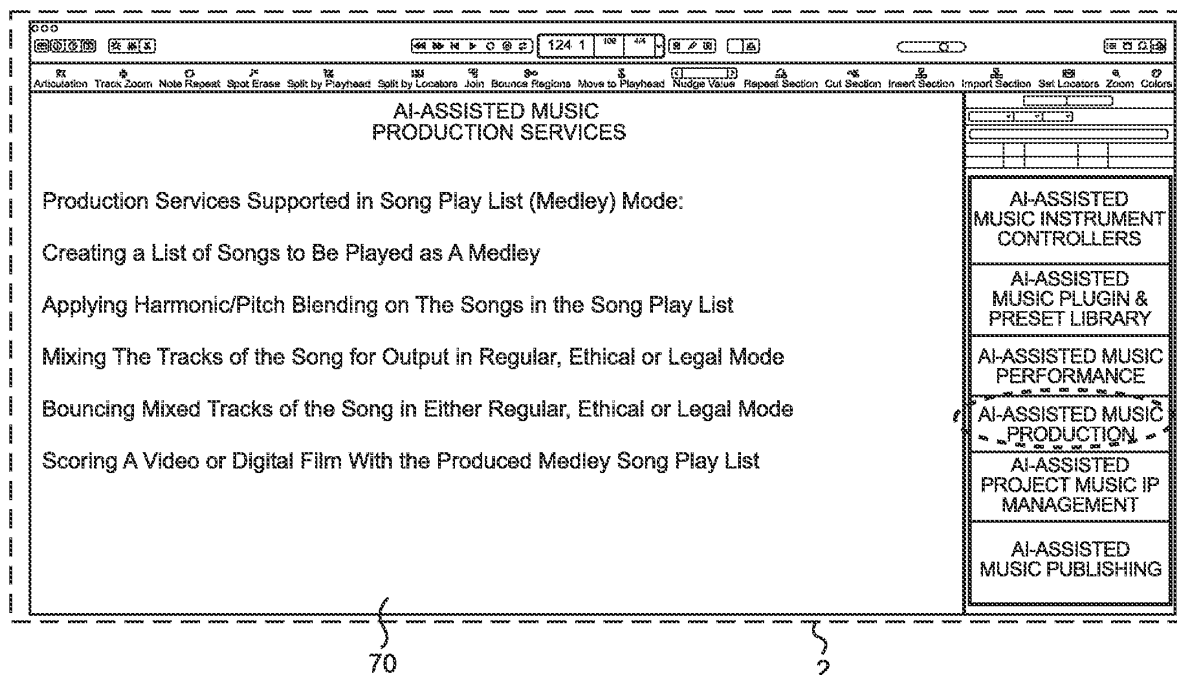


FIG. 69B2

**FIG. 69C**

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

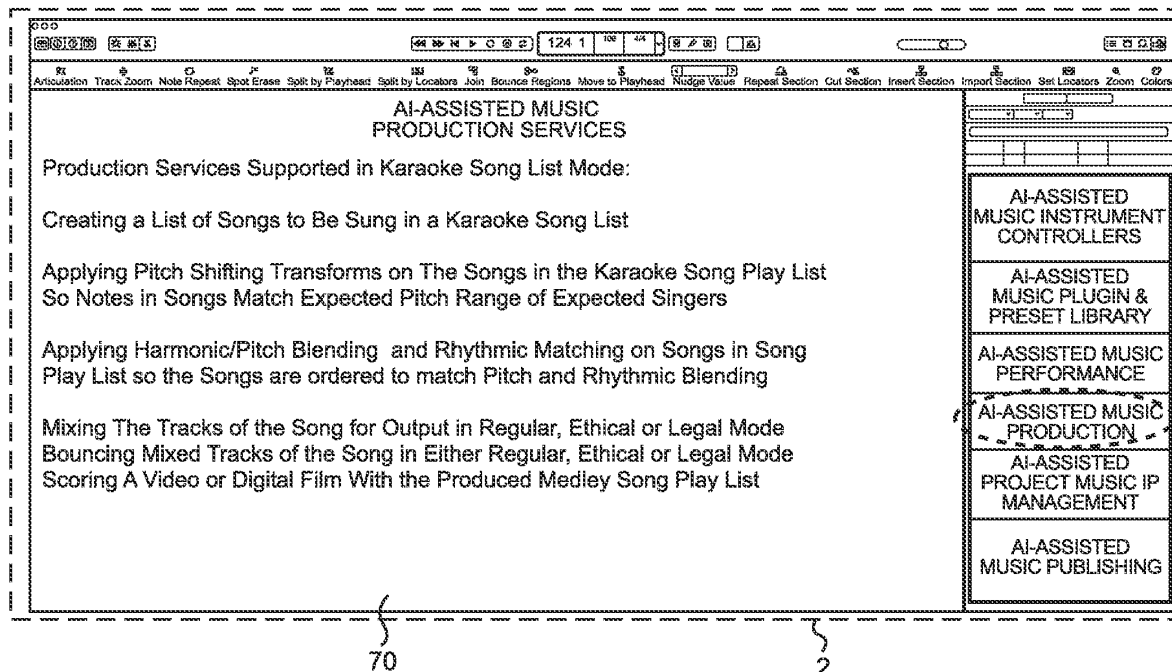


FIG. 69D

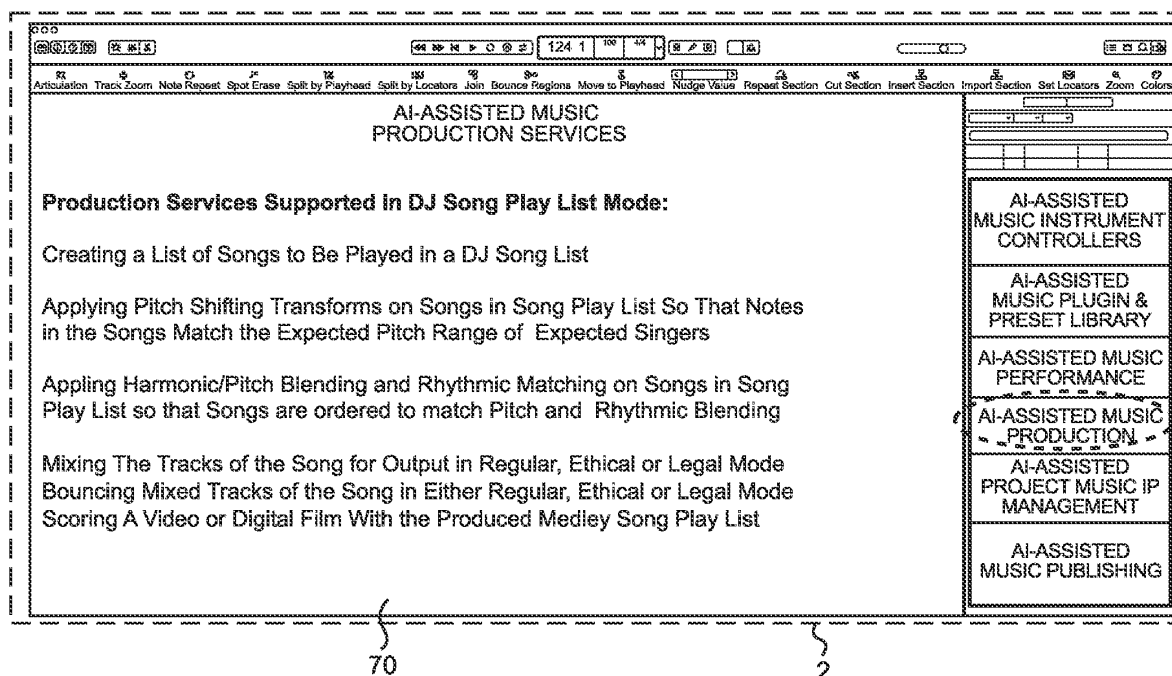


FIG. 69E

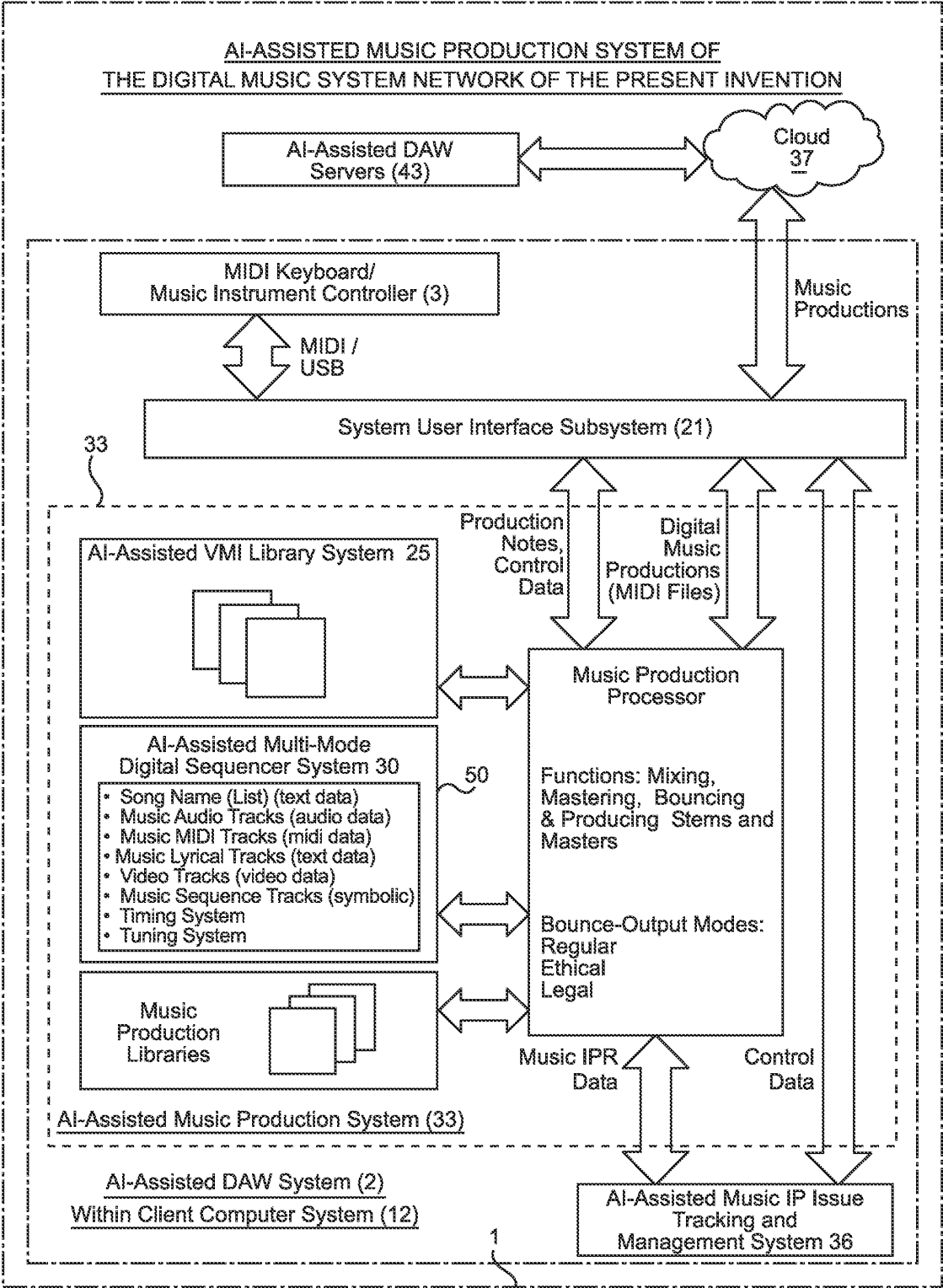


FIG. 70

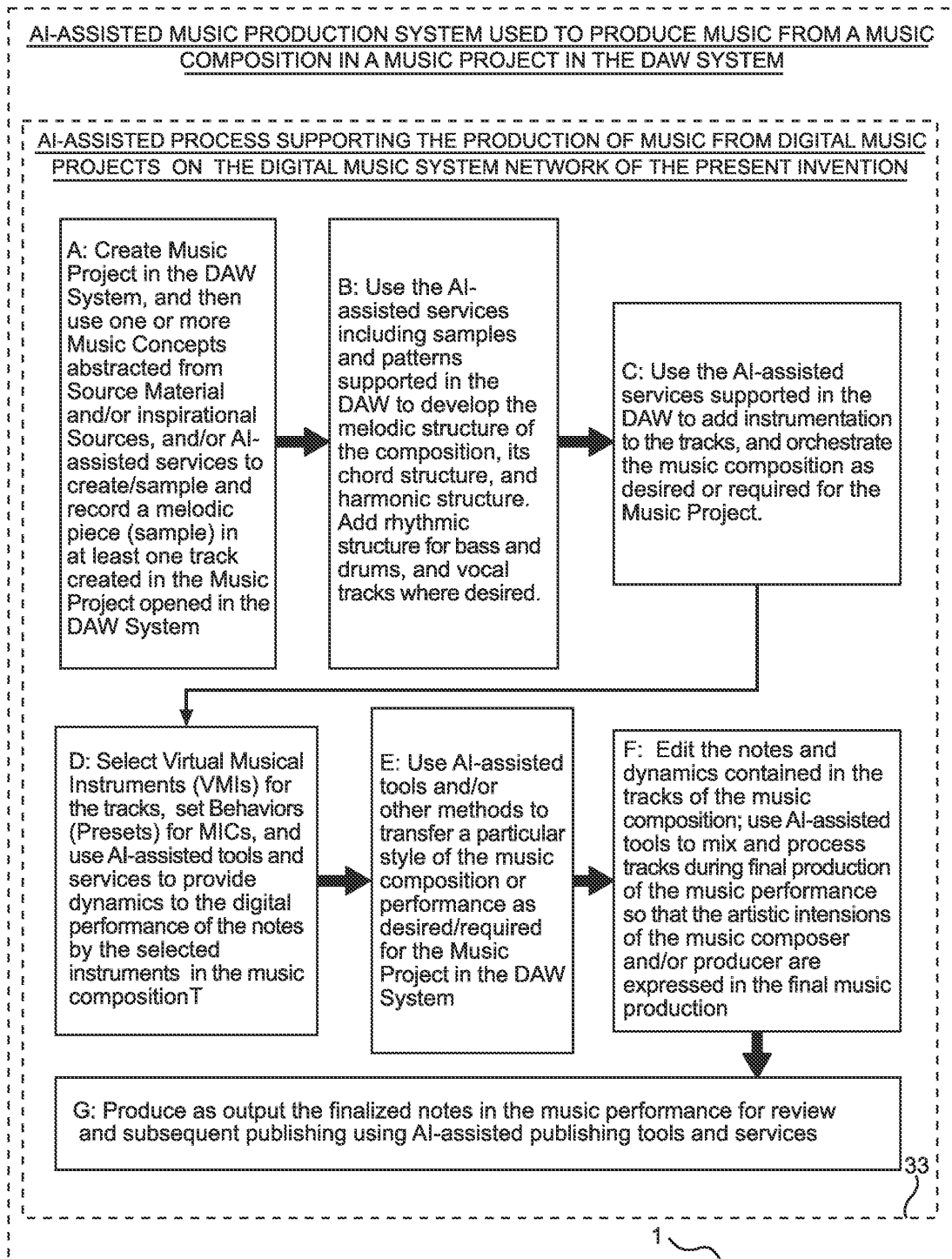


FIG. 71

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

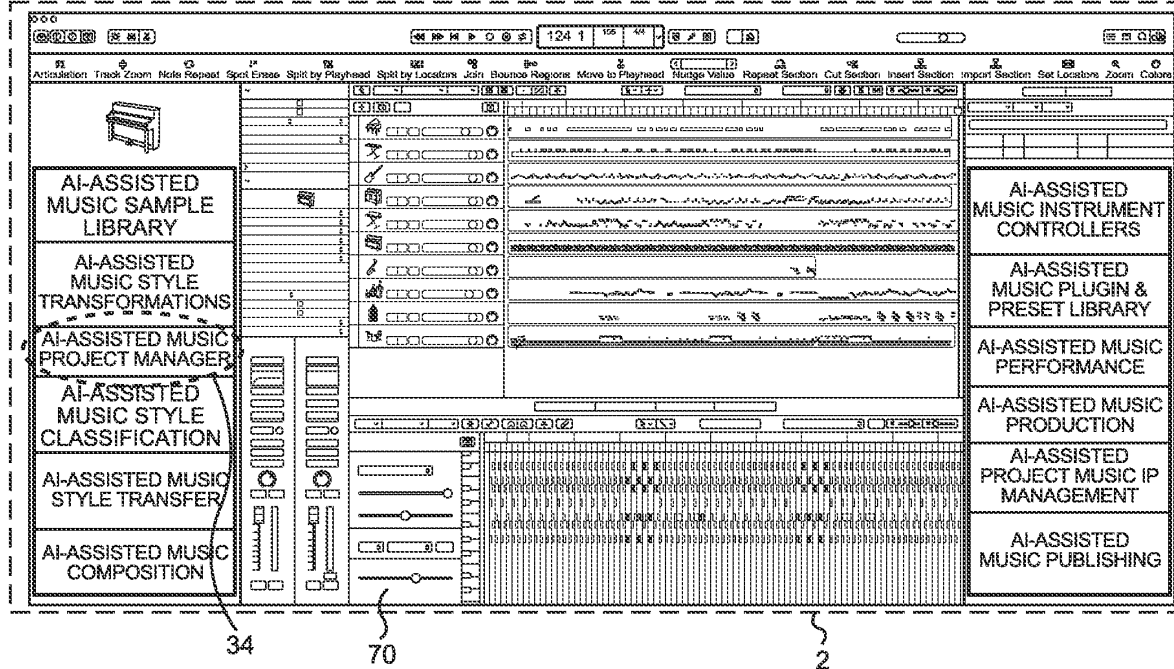


FIG. 72

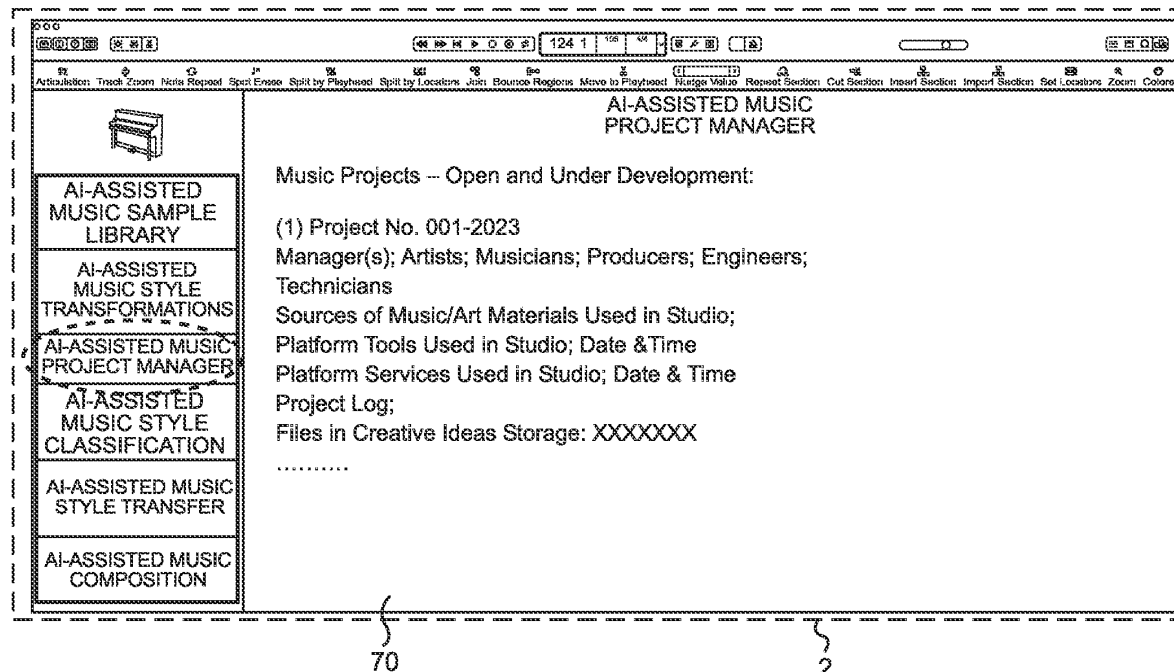


FIG. 72A

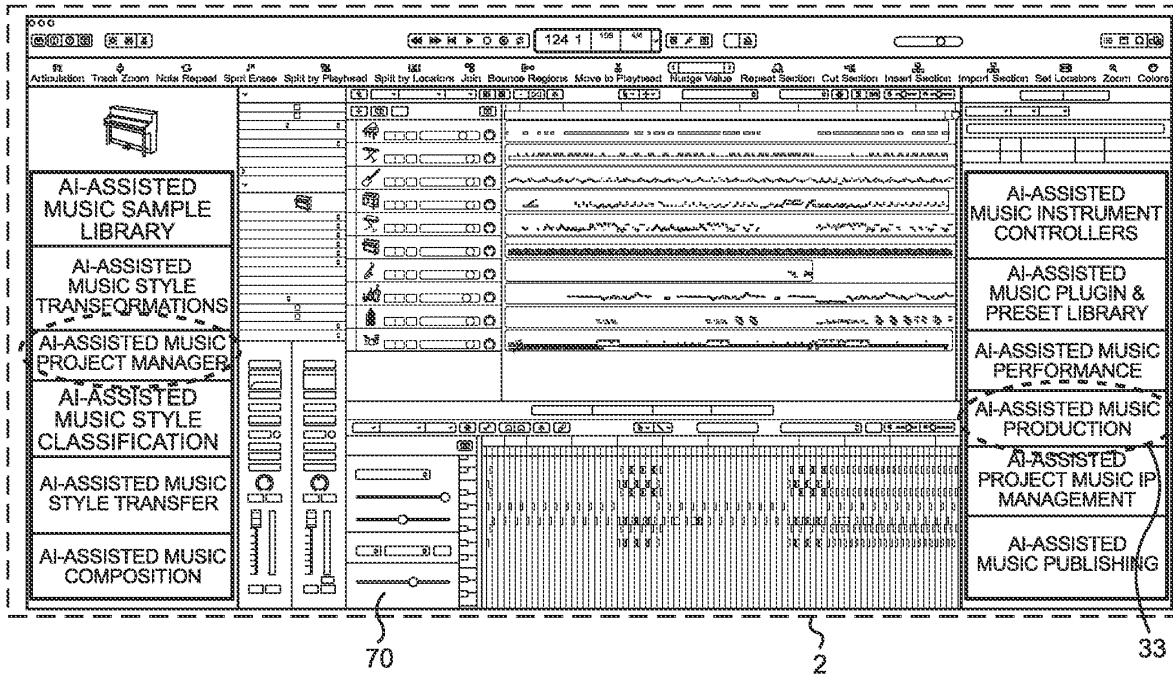


FIG. 72B

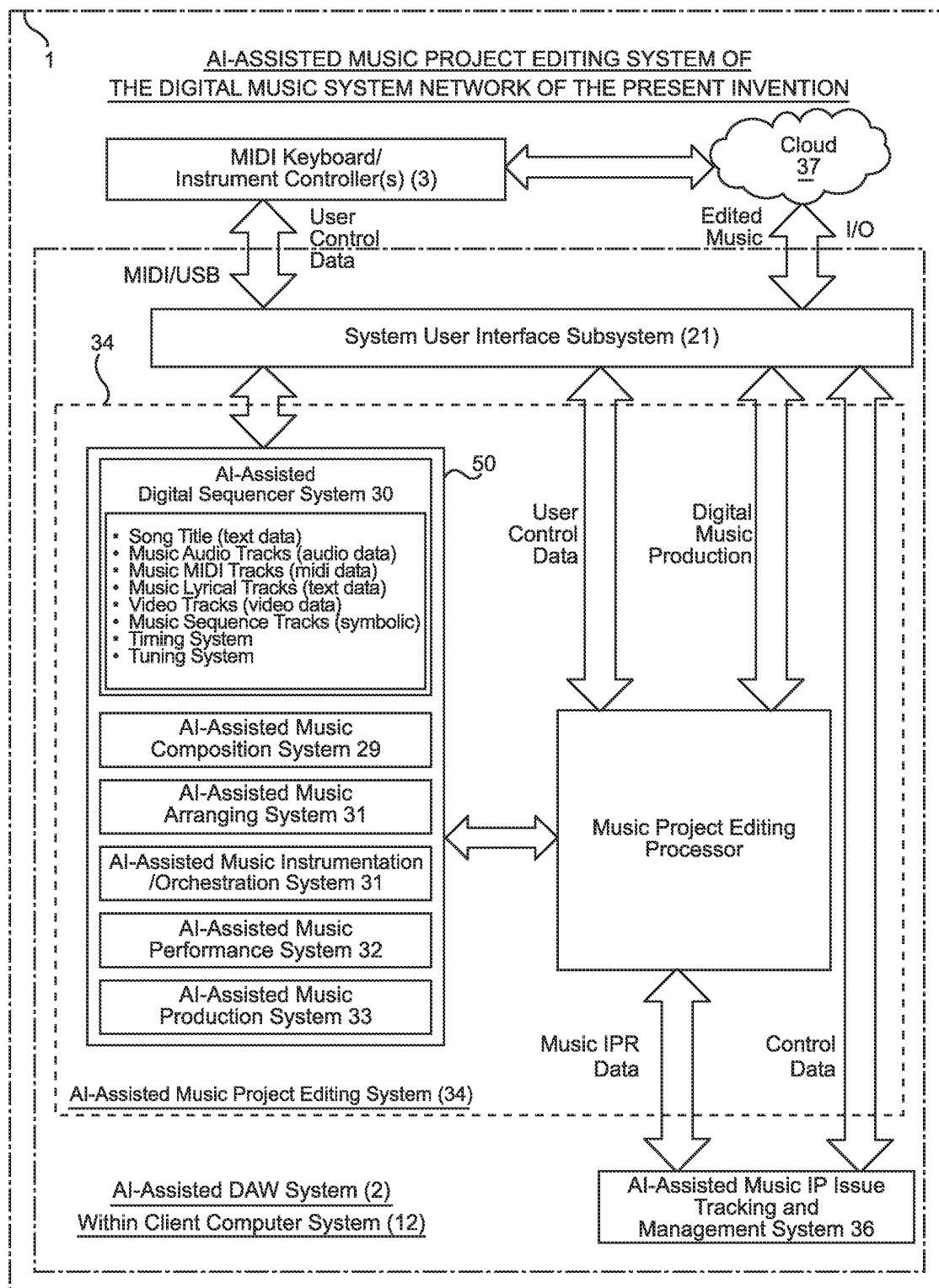


FIG. 73

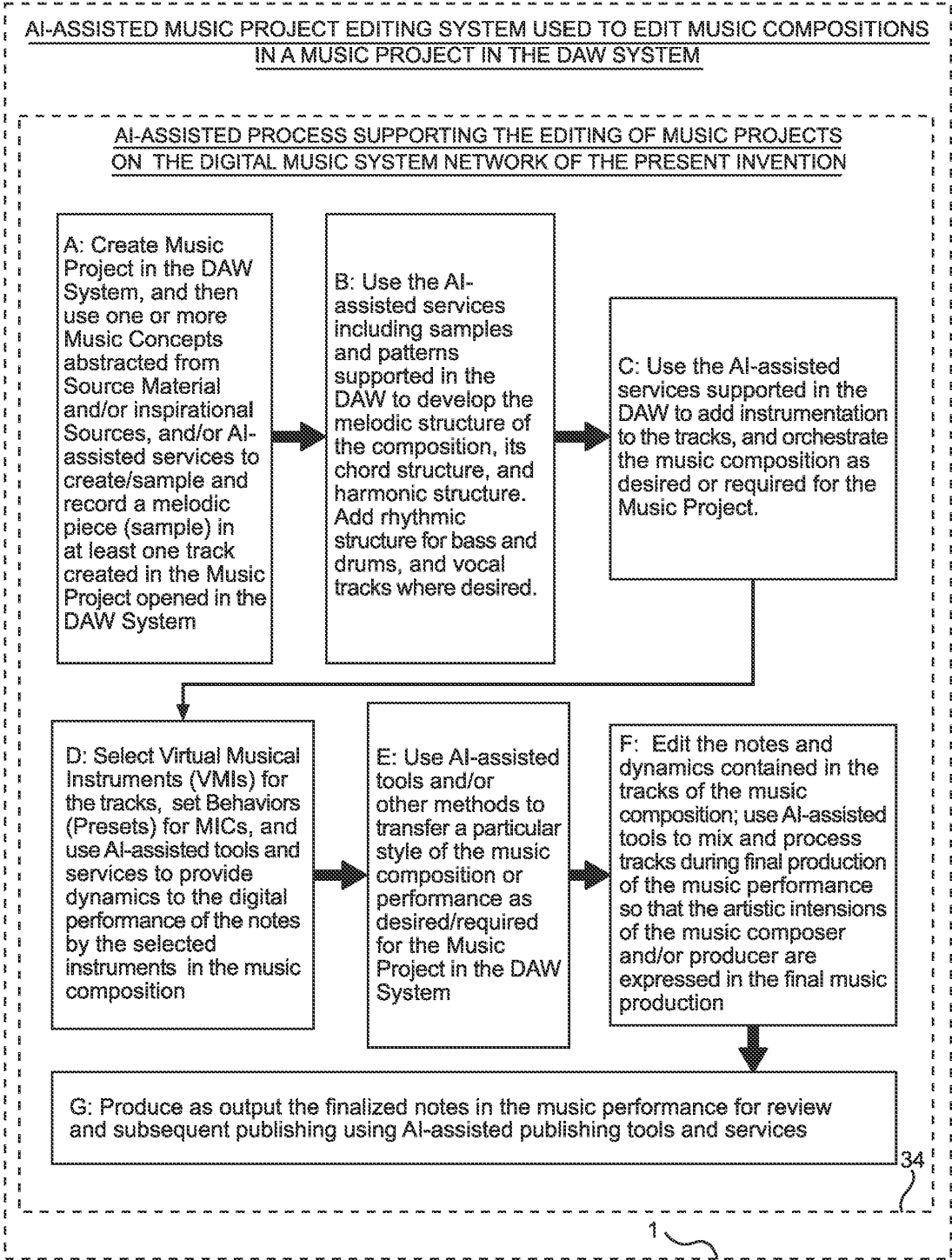


FIG. 74

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION

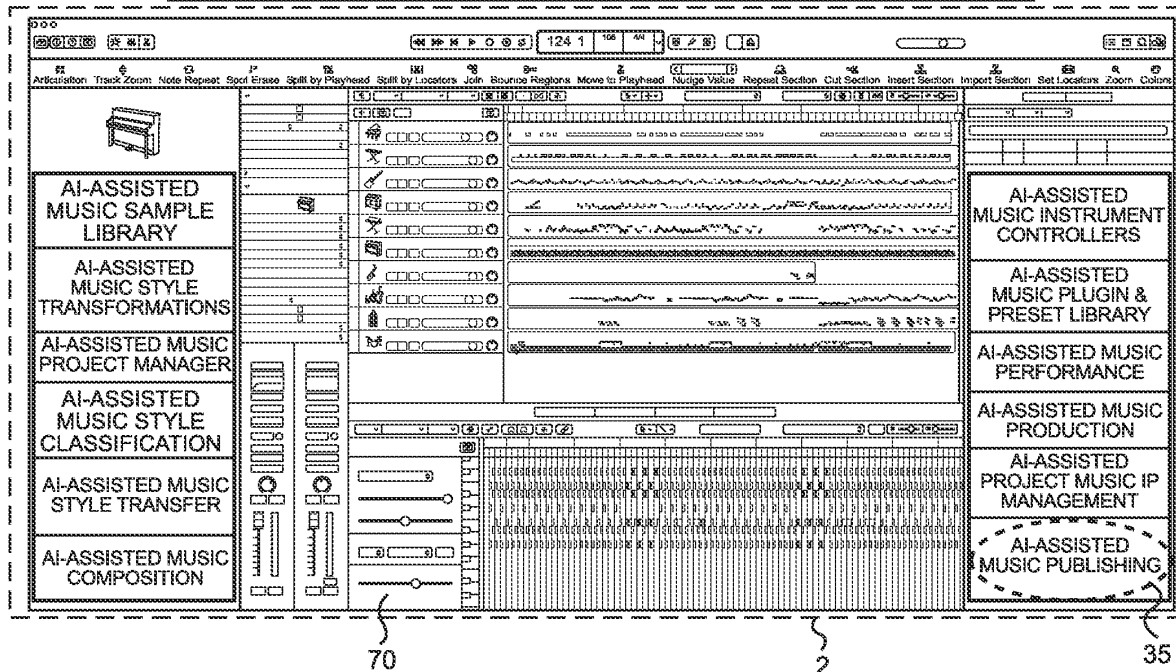


FIG. 75

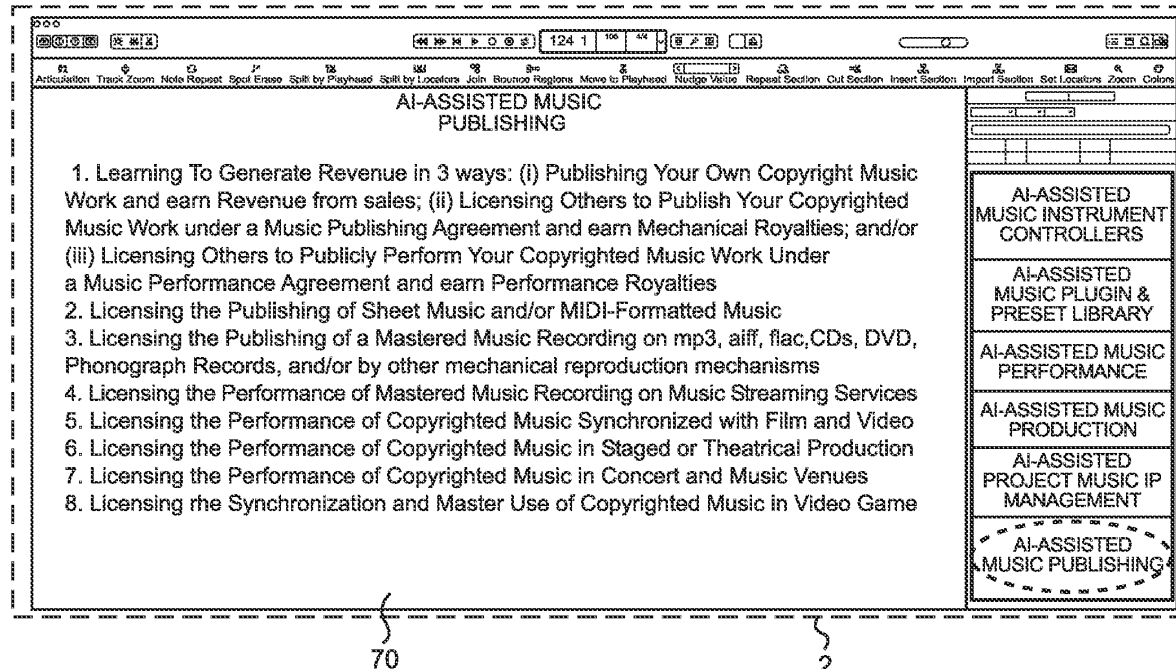


FIG. 75A

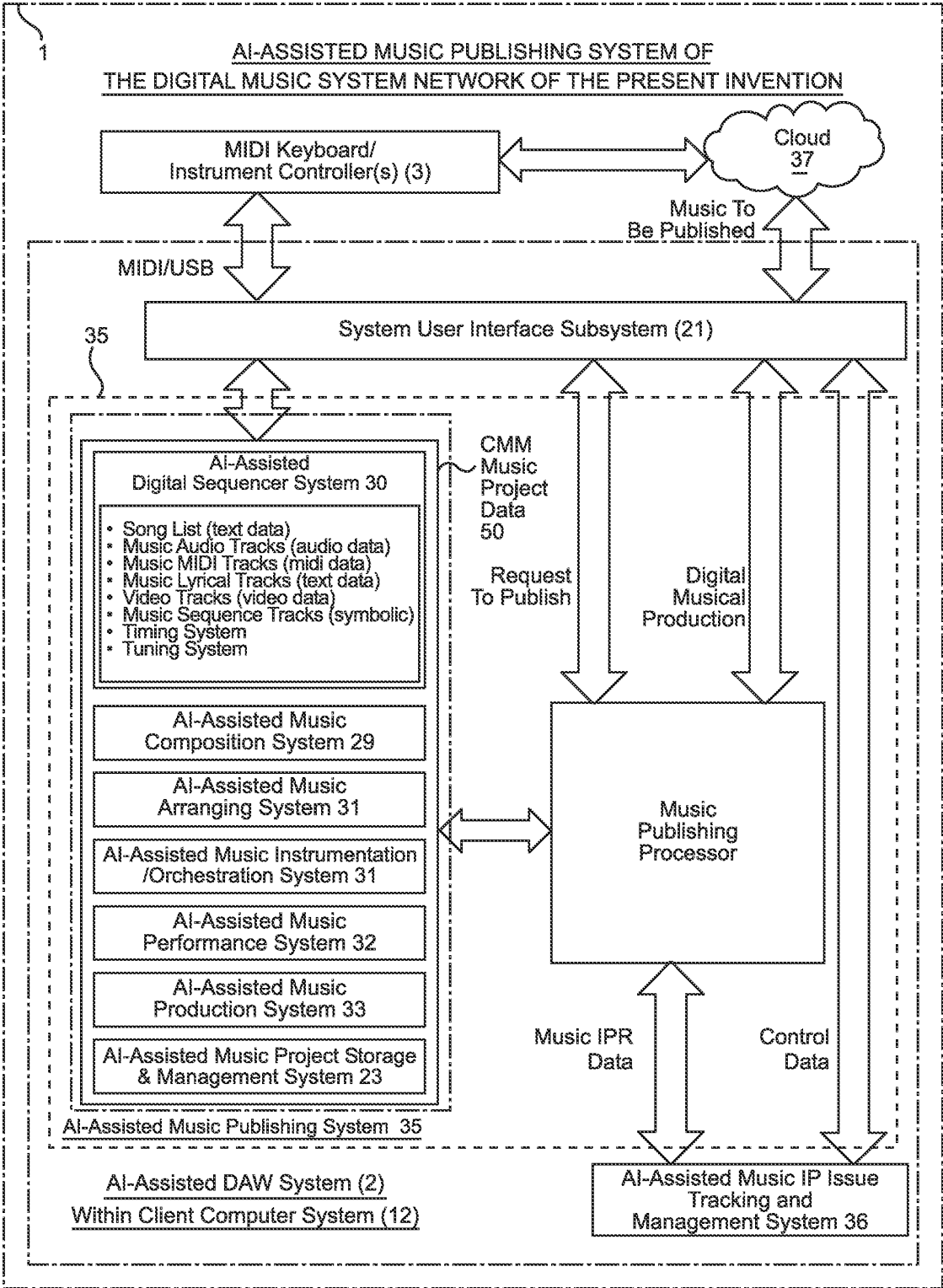


FIG. 76

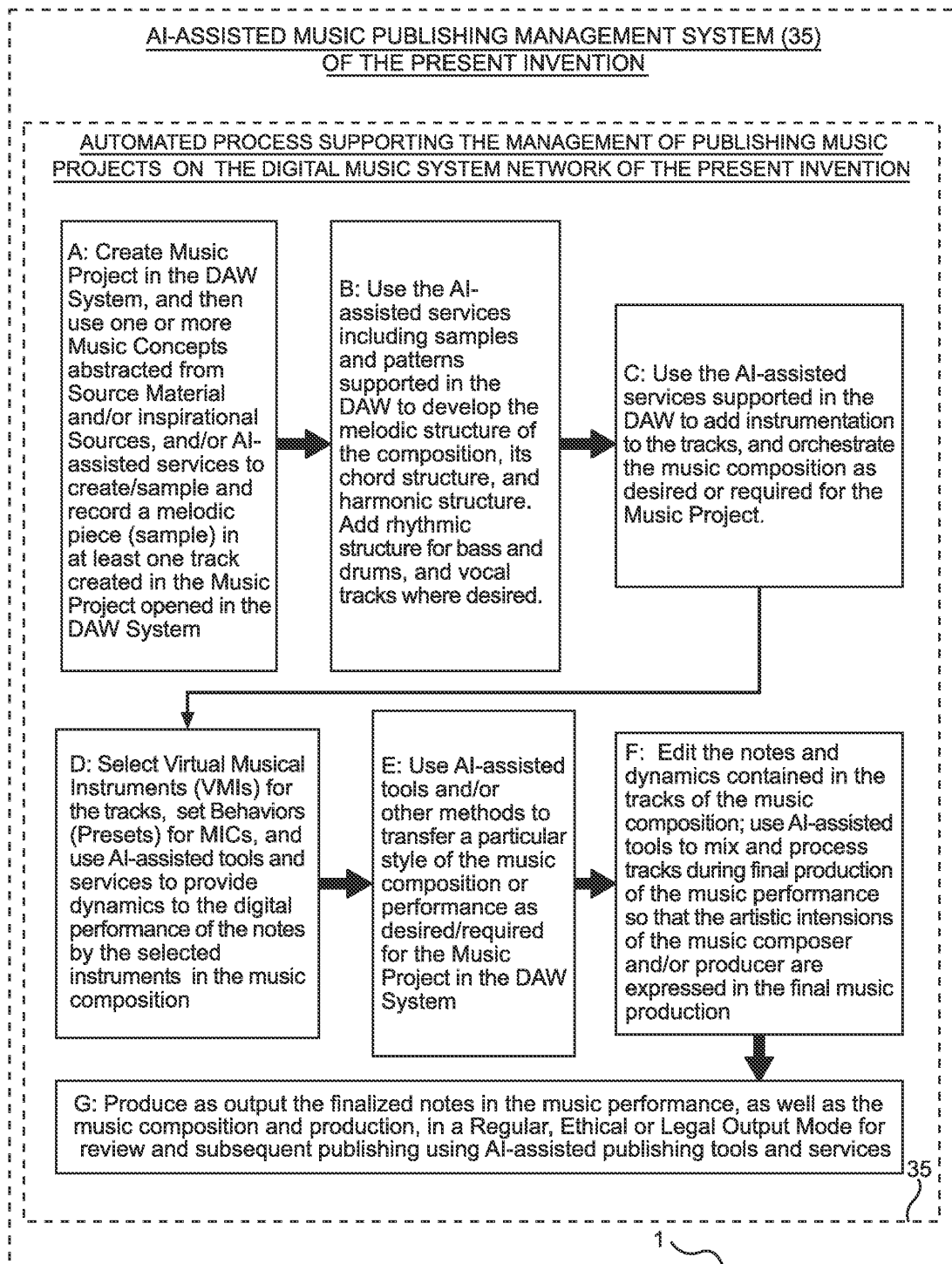


FIG. 77

**ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION**

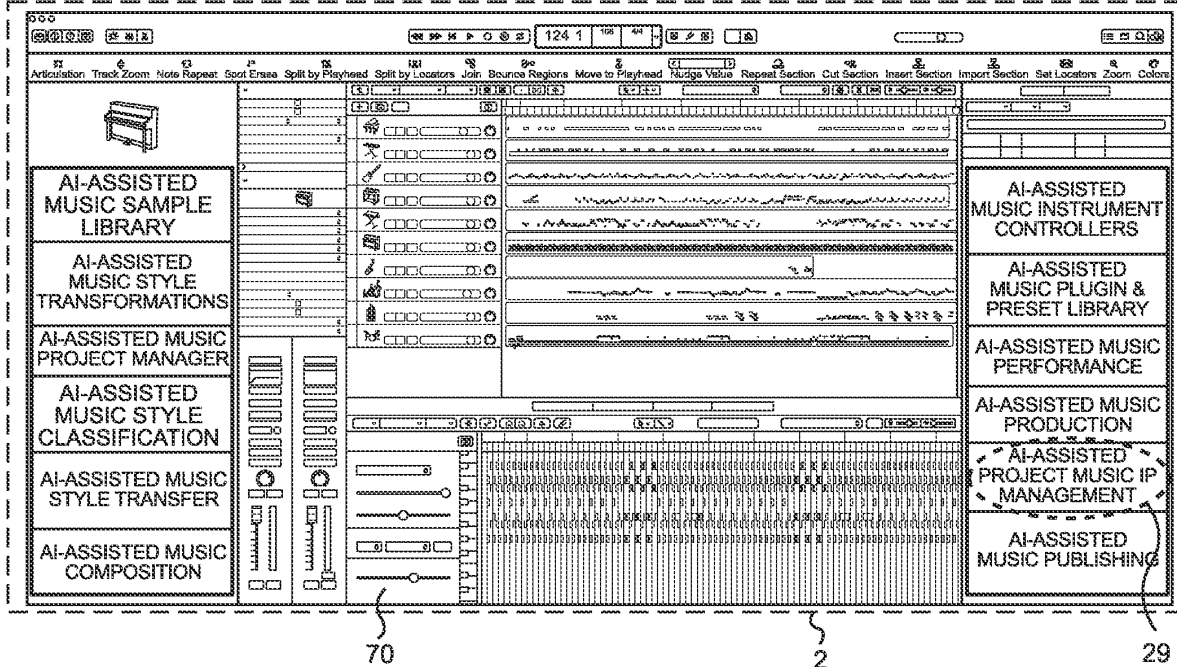


FIG. 78

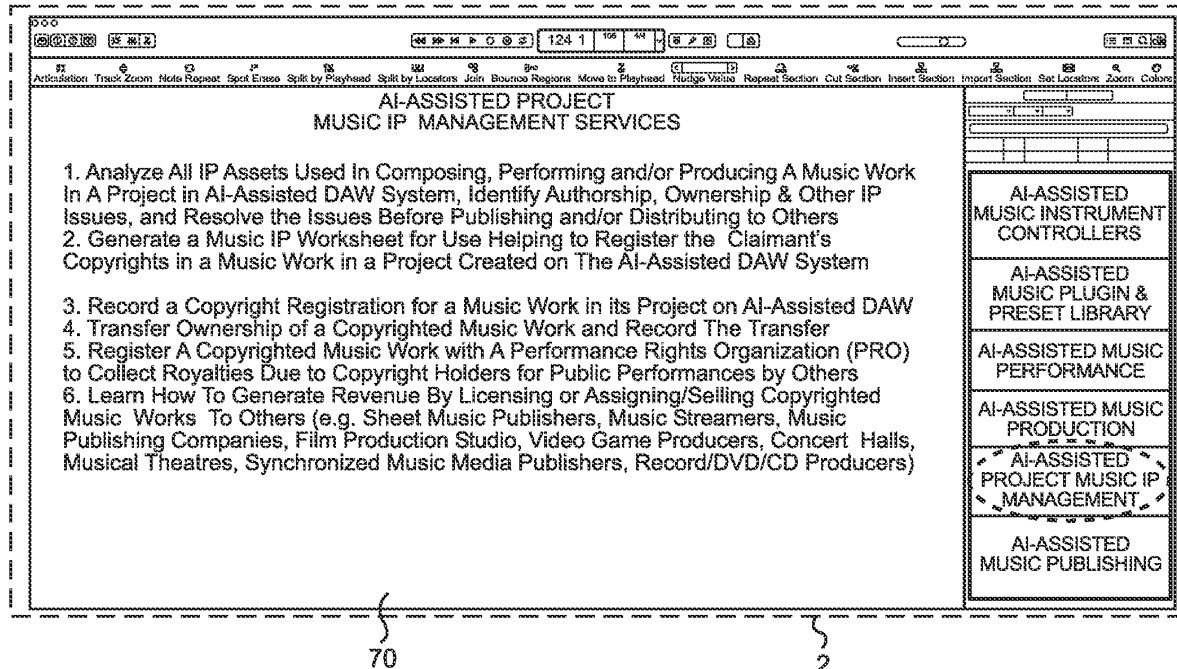


FIG. 78A

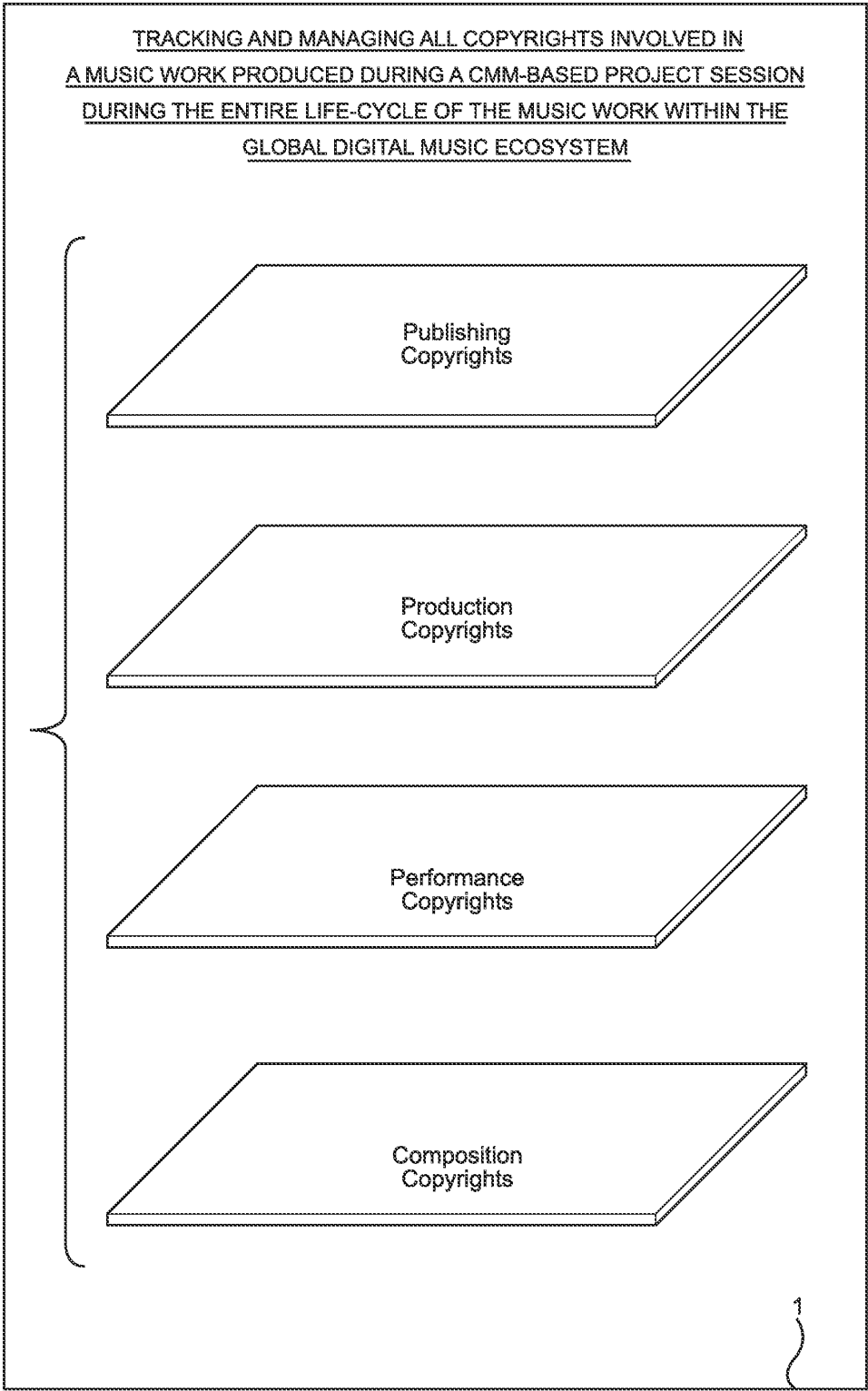


FIG. 79

MULTI-LAYER COLLABORATIVE COPYRIGHT OWNERSHIP TRACKING MODEL
AND CMM-BASED DATA FILE STRUCTURE FOR MUSICAL WORKS CREATED
ON A DIGITAL AUDIO WORKSTATION (DAW) OF PRESENT INVENTION



FIG. 80

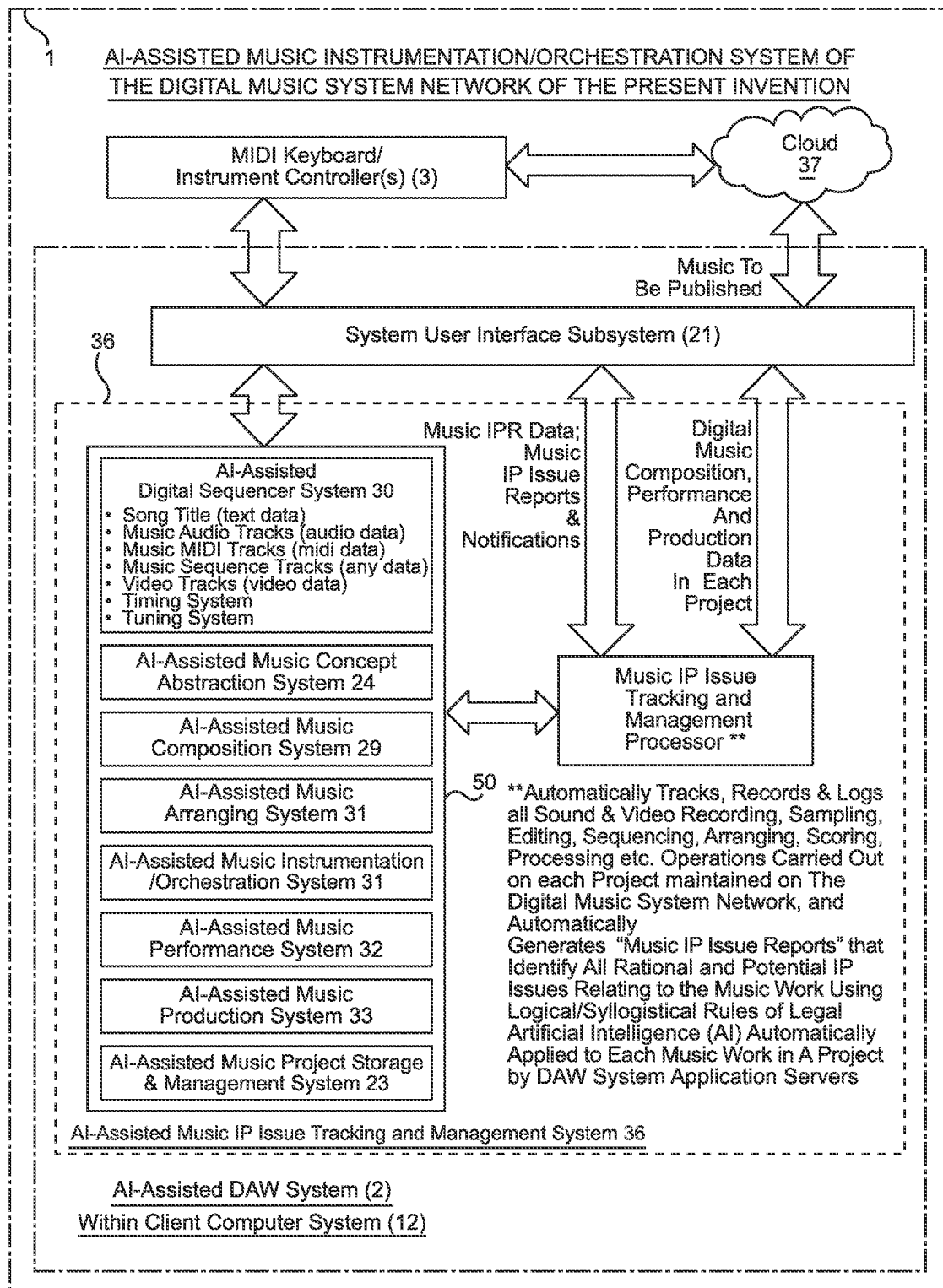
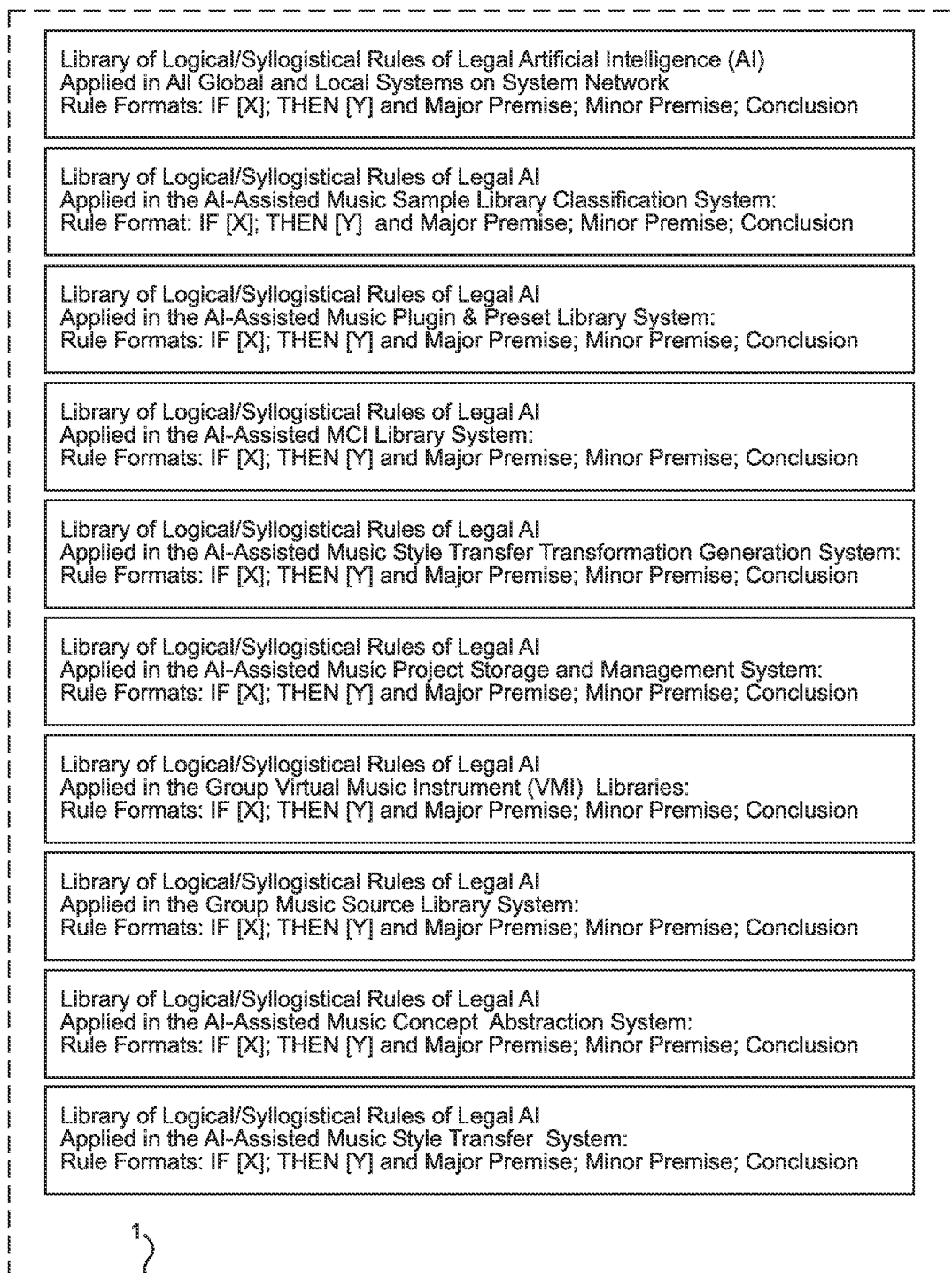


FIG. 81

LIBRARIES OF LOGICAL/SYLOGISTICAL RULES OF LEGAL ARTIFICIAL INTELLIGENCE (AI)
FOR AUTOMATED EXECUTION AND APPLICATION TO MUSIC PROJECTS IN
THE AI-ASSISTED DAW SYSTEM OF THE PRESENT INVENTION

**FIG. 81A**

LIBRARIES OF LOGICAL/SYLOGISTICAL RULES OF LEGAL ARTIFICIAL INTELLIGENCE (AI)
FOR AUTOMATED EXECUTION AND APPLICATION TO MUSIC PROJECTS IN
THE AI-ASSISTED DAW SYSTEM OF THE PRESENT INVENTION

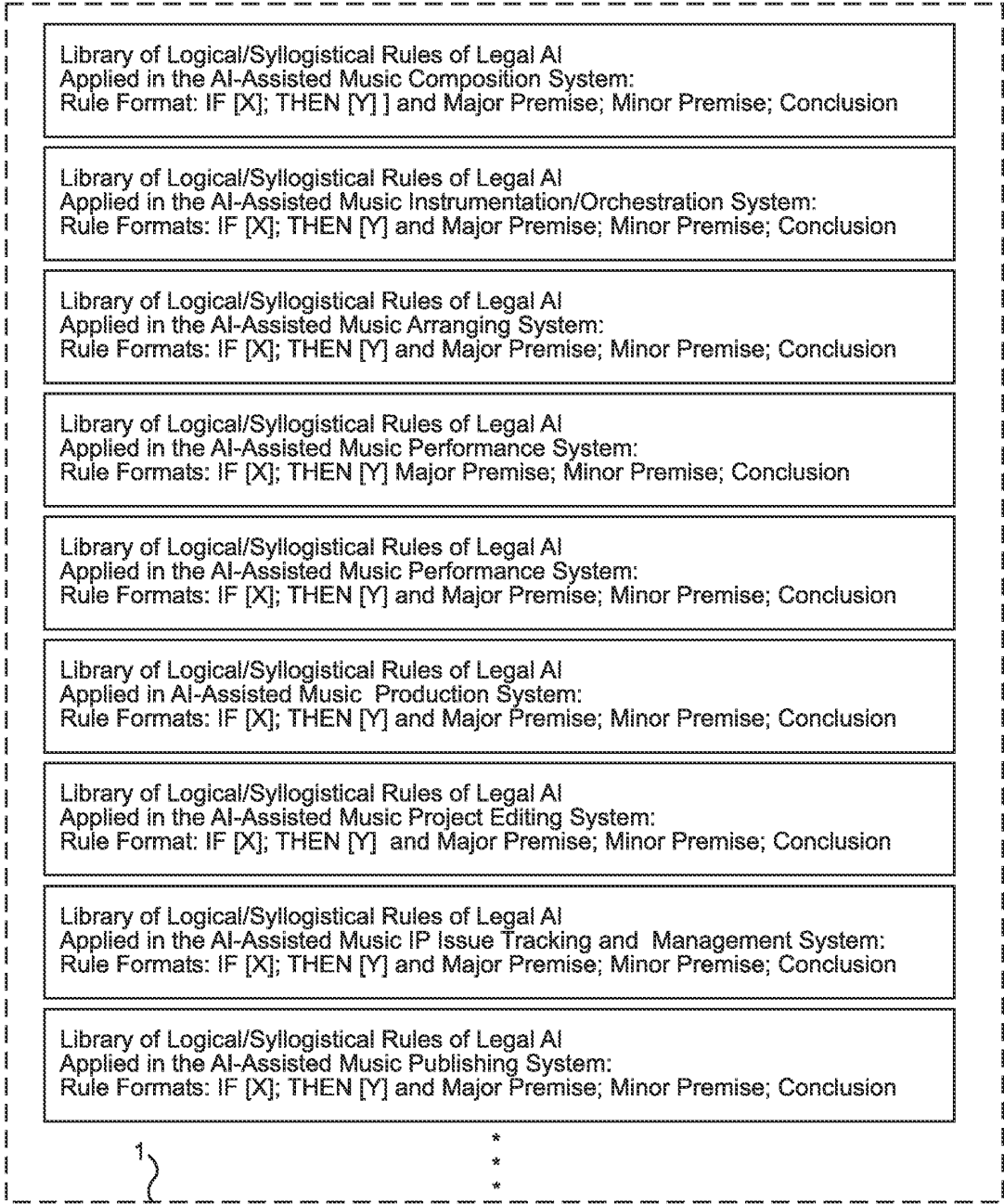


FIG. 81B

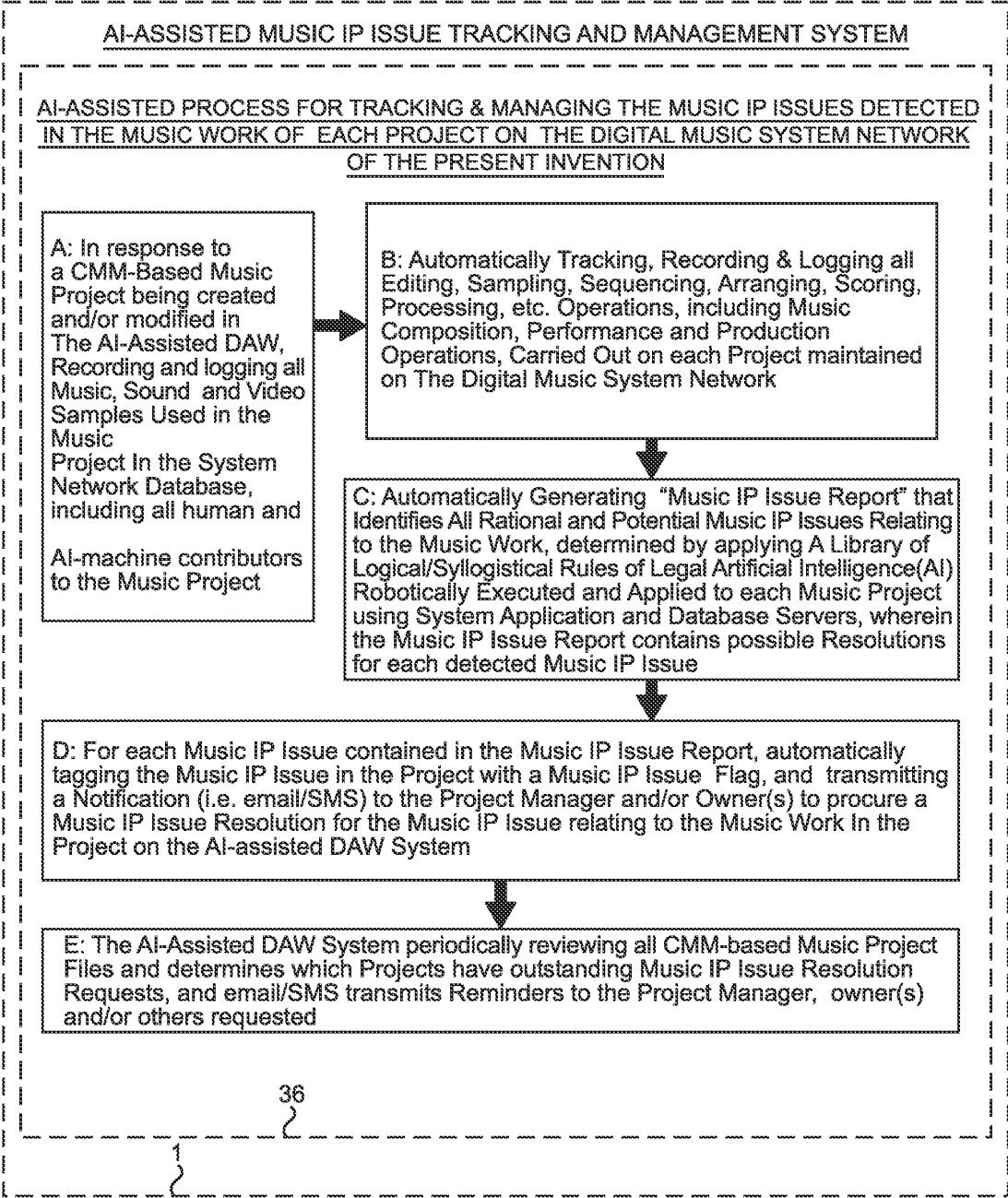
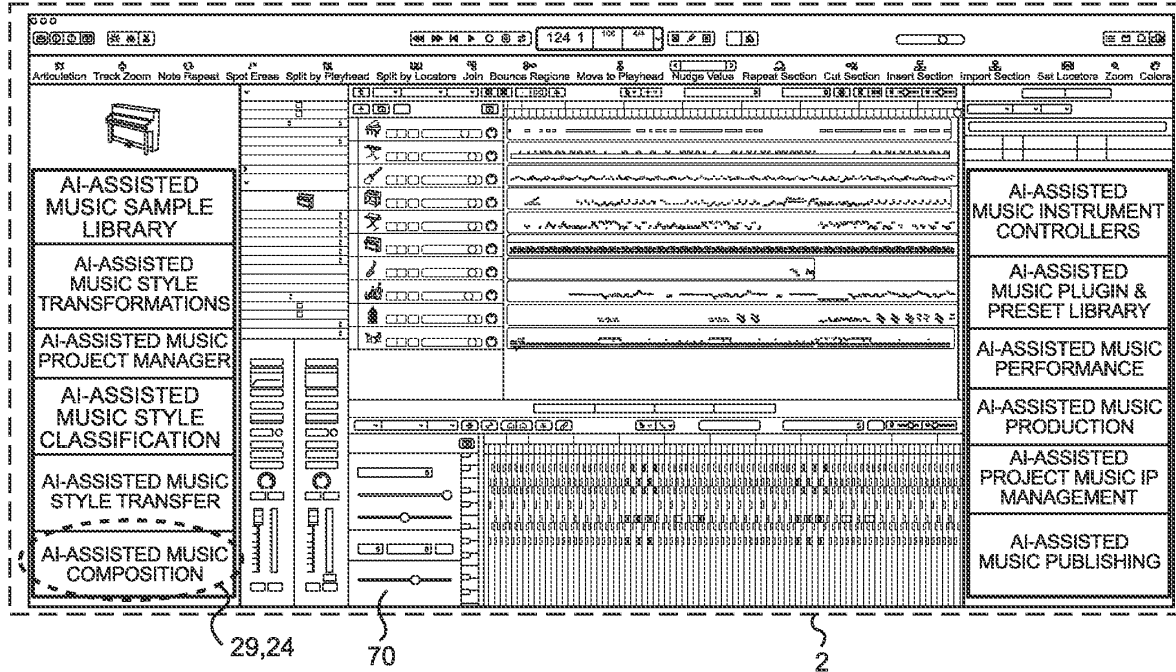
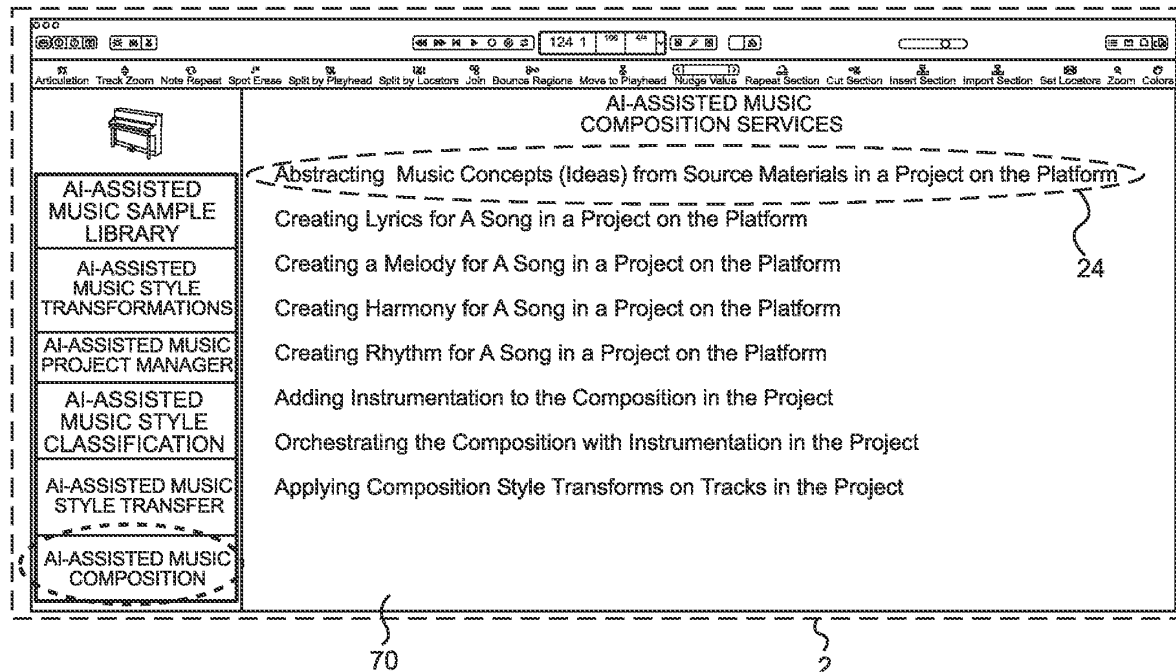


FIG. 82

**ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC SYSTEM NETWORK OF THE PRESENT INVENTION**

**FIG. 83****FIG. 83A**

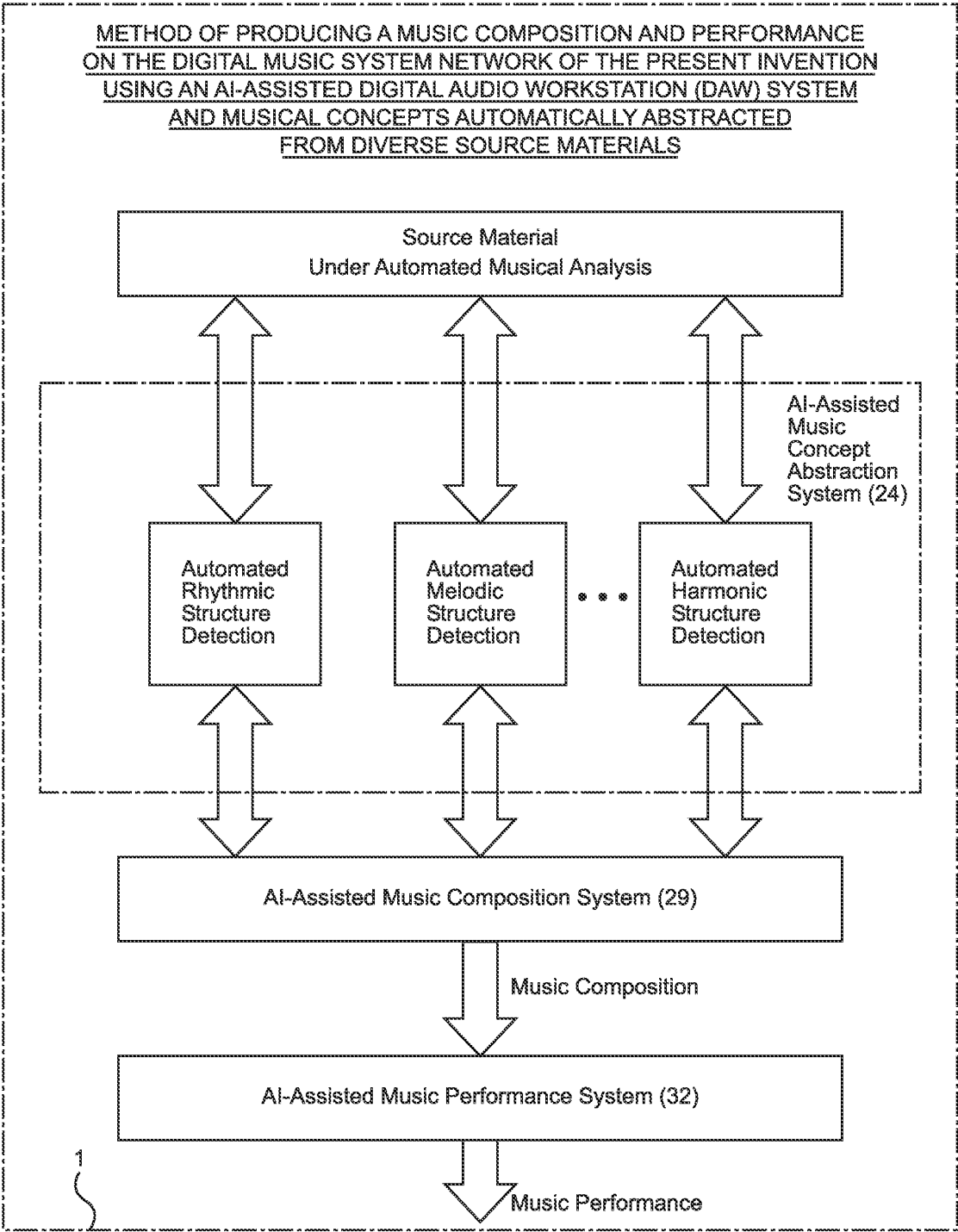


FIG. 84

A FIRST METHOD OF GENERATING A MUSIC COMPOSITION ON THE AI-ASSISTED
DIGITAL AUDIO WORKSTATION (DAW) SYSTEM SUPPORTED BY A COLLABORATIVE
MUSICAL MODEL (CMM) OF THE PRESENT INVENTION

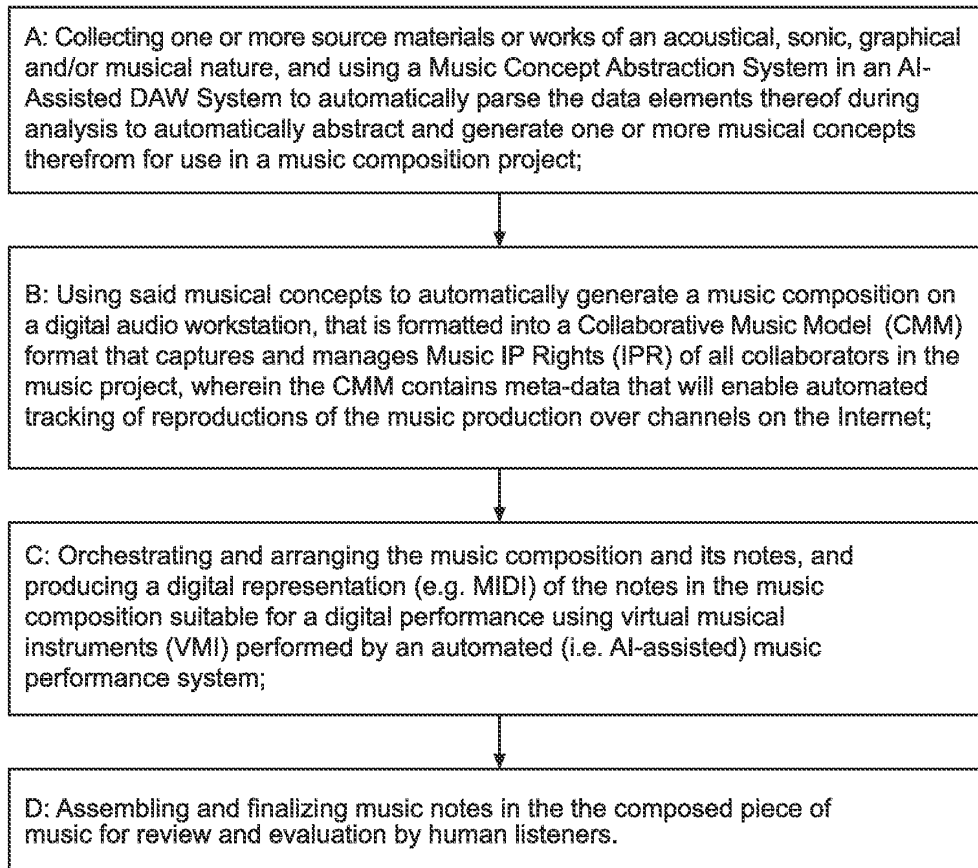


FIG. 85

SECOND METHOD OF GENERATING A MUSIC COMPOSITION ON THE AI-ASSISTED
DIGITAL AUDIO WORKSTATION (DAW) SYSTEM SUPPORTED BY A COLLABORATIVE
MUSICAL MODEL (CMM) AND AI-GENERATIVE MUSIC COMPOSITION TOOLS

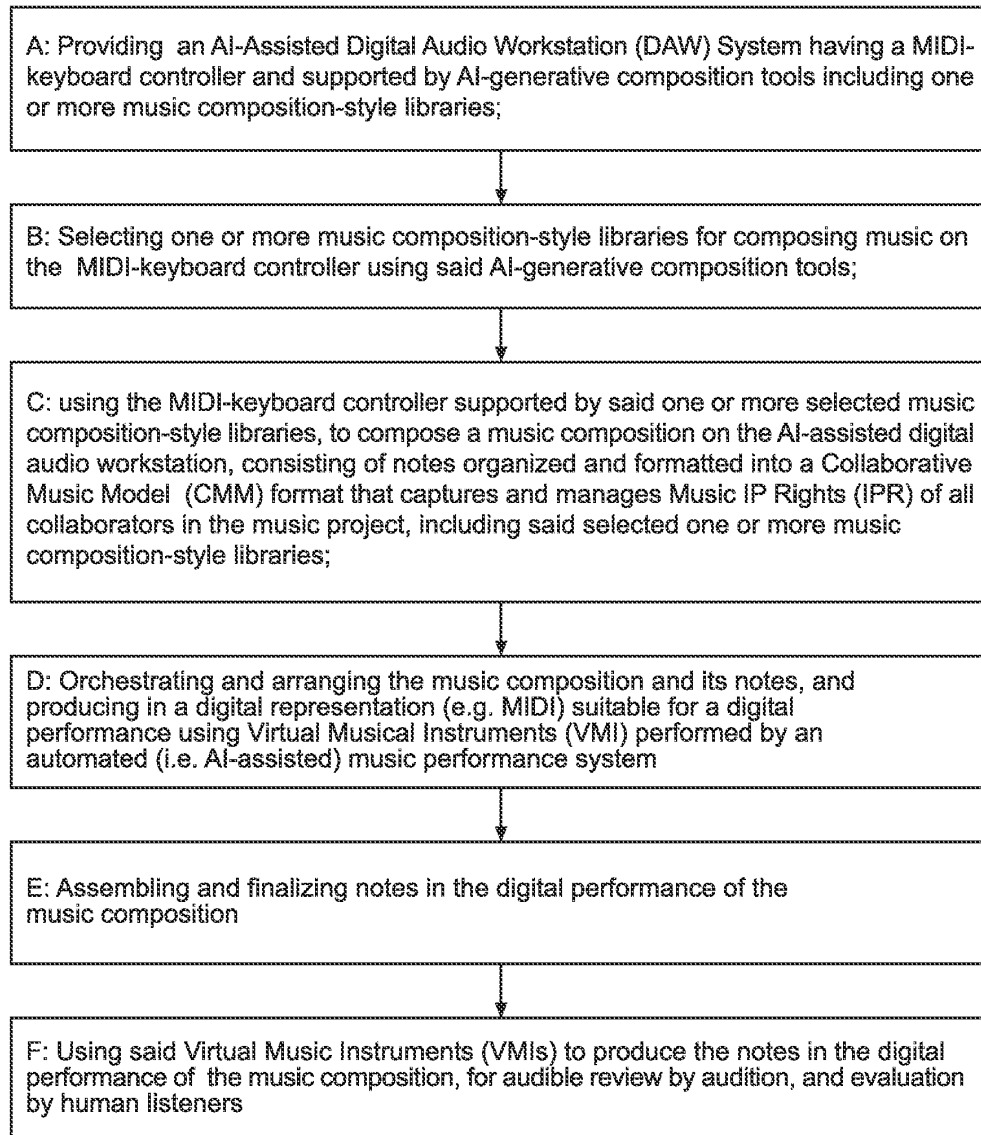


FIG. 86

THIRD METHOD OF GENERATING A MUSIC COMPOSITION ON THE AI-ASSISTED DIGITAL
AUDIO WORKSTATION (DAW) SYSTEM SUPPORTED BY A COLLABORATIVE MUSICAL MODEL
(CMM) AND AI-GENERATIVE MUSIC COMPOSITION AND PERFORMANCE TOOLS

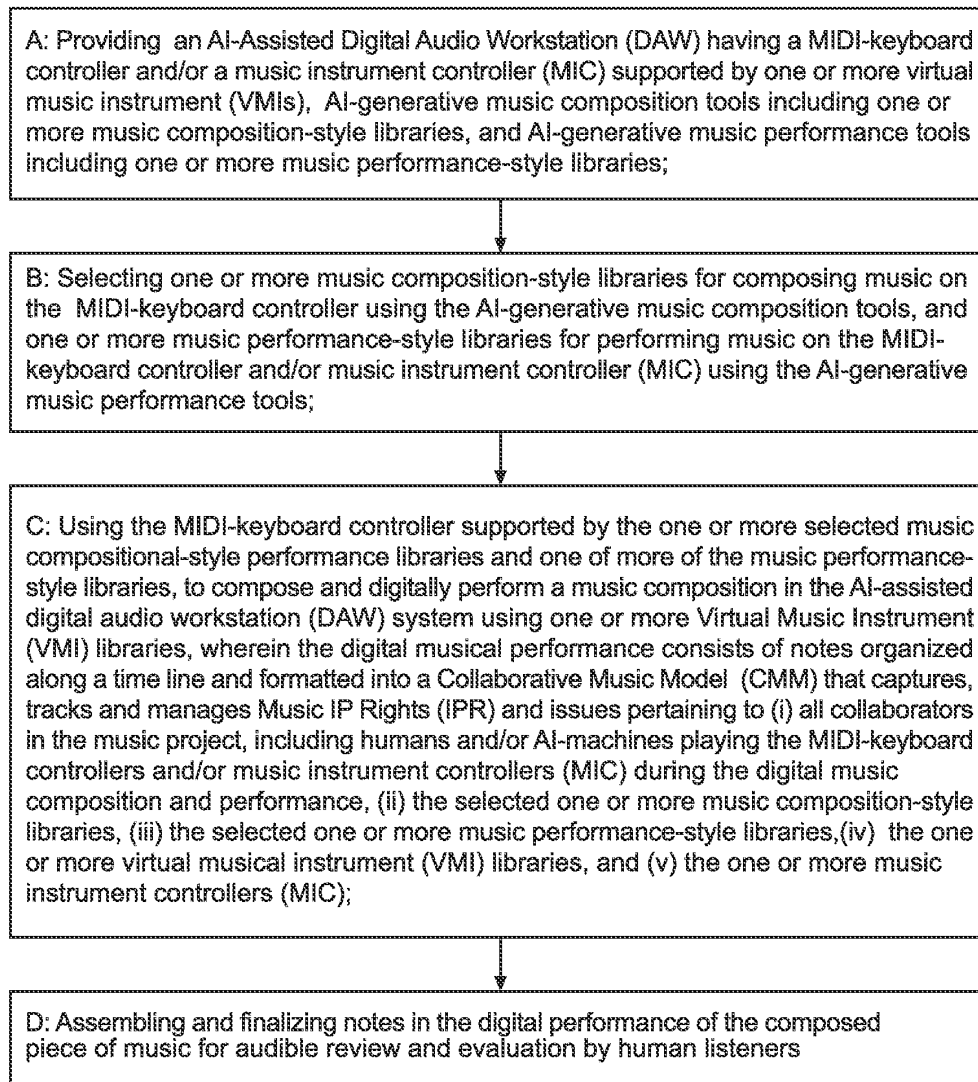


FIG. 87

METHOD OF EDITING A MUSIC COMPOSITION ON AN AI-ASSISTED DIGITAL AUDIO WORKSTATION (DAW) SYSTEM SUPPORTED BY A COLLABORATIVE MUSICAL MODEL (CMM) AND AN AI-ASSISTED MUSIC PROJECT EDITING SYSTEM

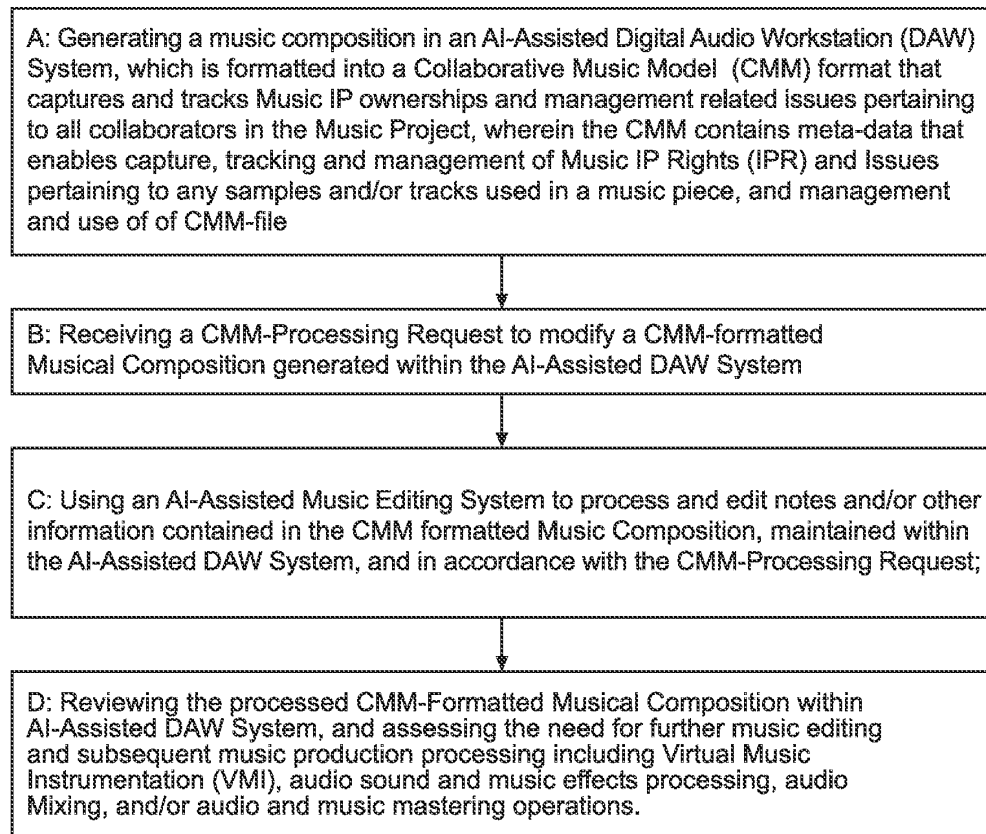


FIG. 88

FIRST METHOD OF GENERATING A DIGITAL PERFORMANCE OF A MUSIC
COMPOSITION ON AN AI-ASSISTED DIGITAL AUDIO WORKSTATION (DAW)
SYSTEM SUPPORTED BY A COLLABORATIVE MUSICAL MODEL (CMM)
ACCORDING TO THE PRESENT INVENTION

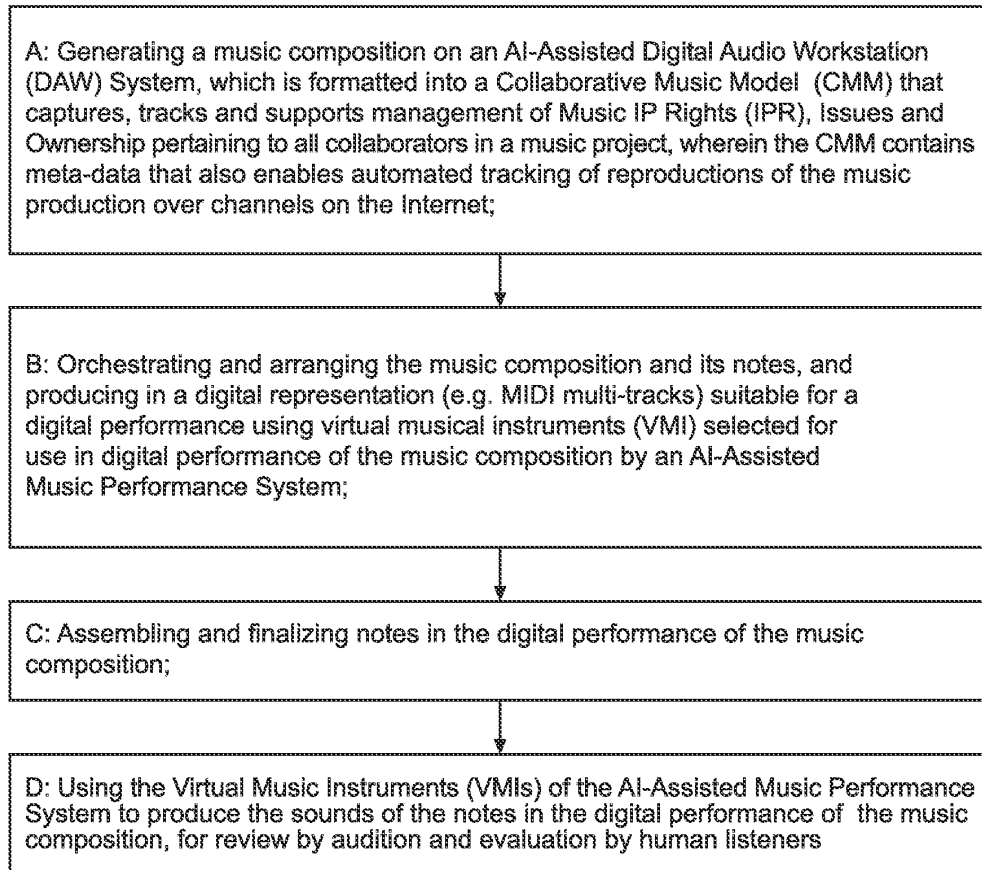


FIG. 89

SECOND METHOD OF GENERATING A DIGITAL PERFORMANCE OF A MUSIC
COMPOSITION ON AN AI-ASSISTED DIGITAL AUDIO WORKSTATION (DAW)
SYSTEM SUPPORTED BY A COLLABORATIVE MUSICAL MODEL (CMM) AND AI-
GENERATIVE MUSIC PERFORMANCE TOOLS

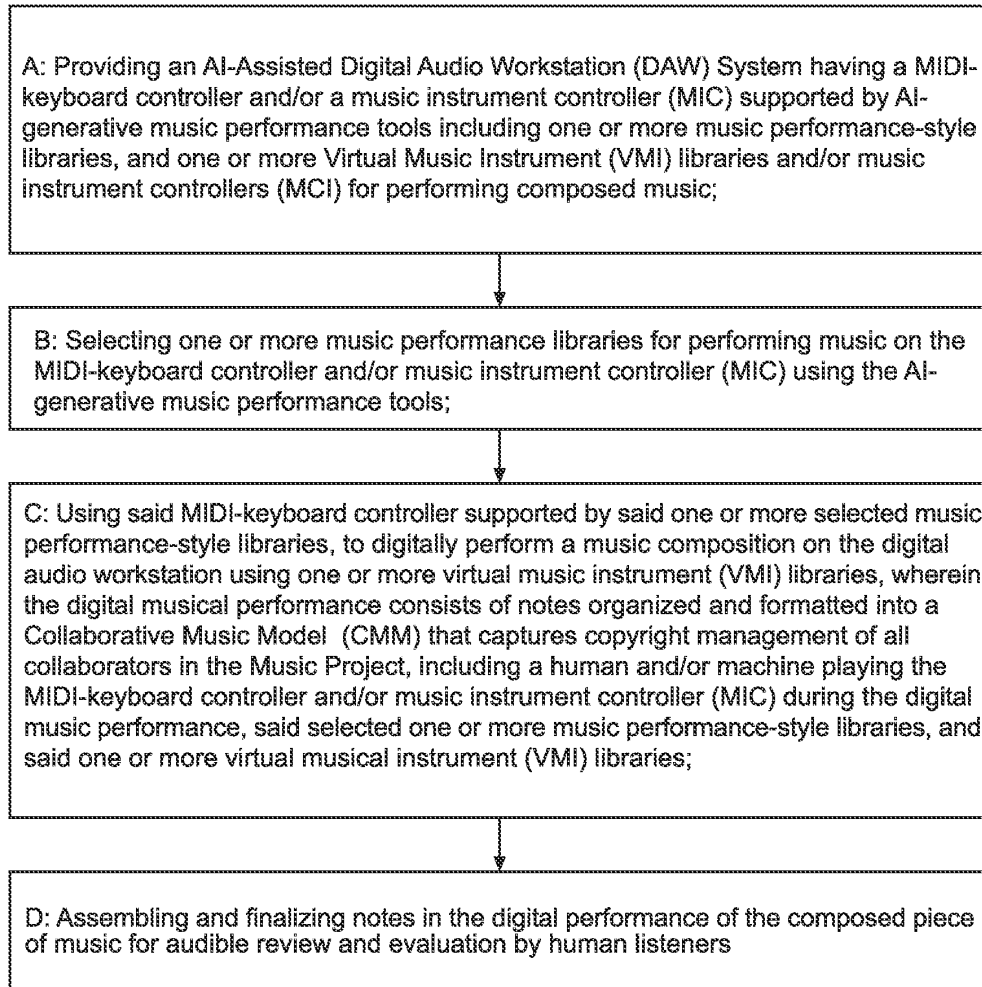
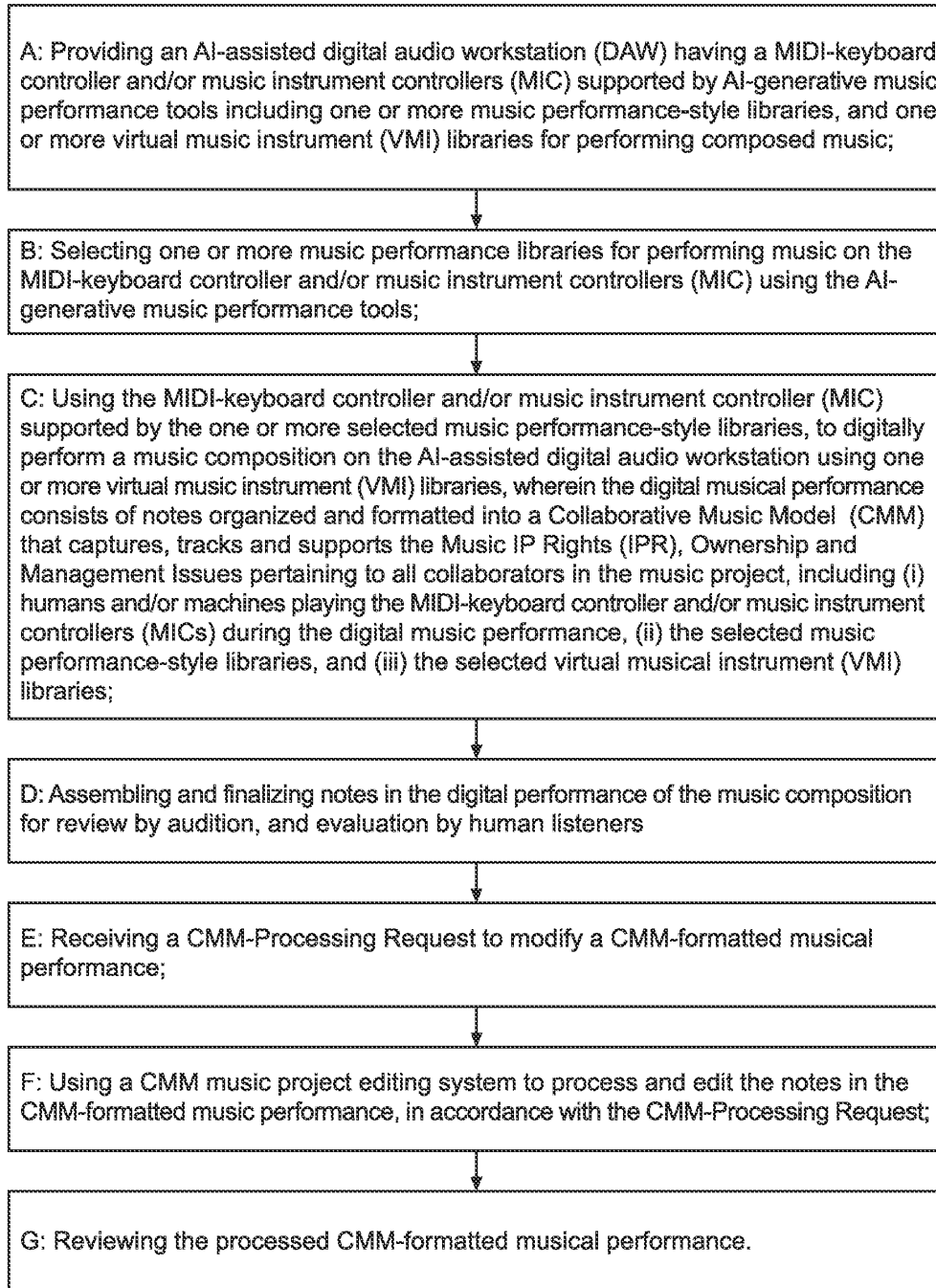


FIG. 90

METHOD OF EDITING A DIGITAL PERFORMANCE OF A MUSIC COMPOSITION ON AN AI-ASSISTED
DIGITAL AUDIO WORKSTATION (DAW) SYSTEM SUPPORTED BY A COLLABORATIVE
MUSICAL MODEL (CMM) AND AN AI-ASSISTED MUSIC PROJECT EDITING SYSTEM

**FIG. 91**

ILLUSTRATIVE GUI SCREENS DISPLAYED ON A DIGITAL AUDIO
WORKSTATION (DAW) DEPLOYED ON AND SUPPORTED BY
THE DIGITAL MUSIC STUDIO SYSTEM NETWORK OF THE PRESENT INVENTION

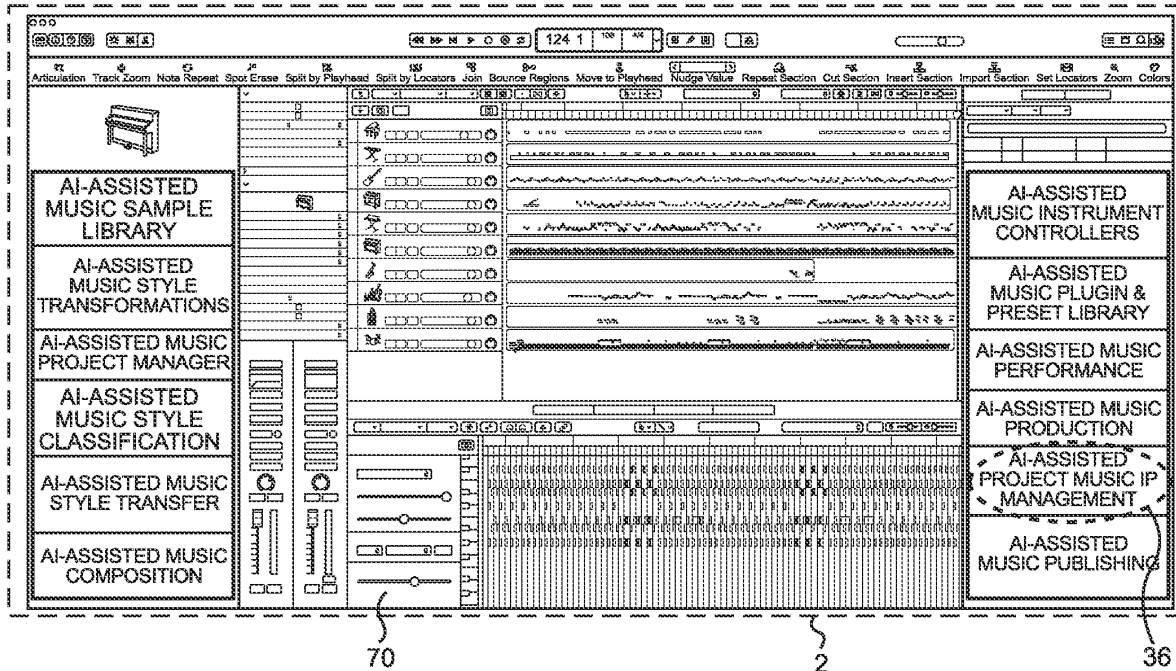


FIG. 92

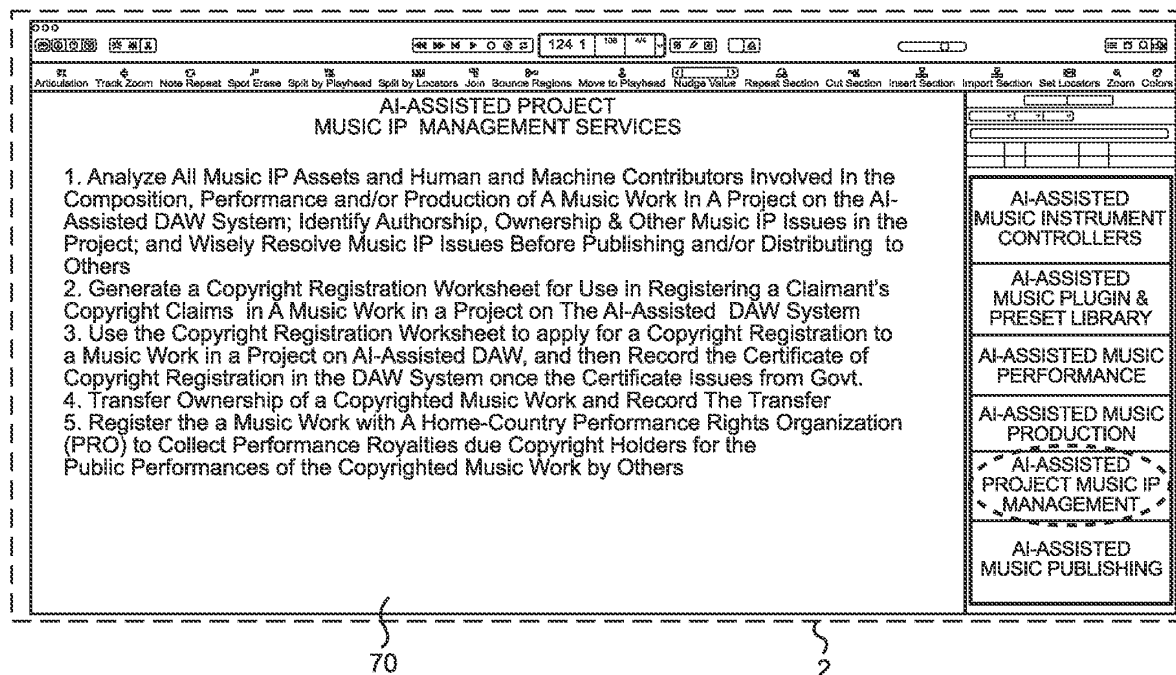
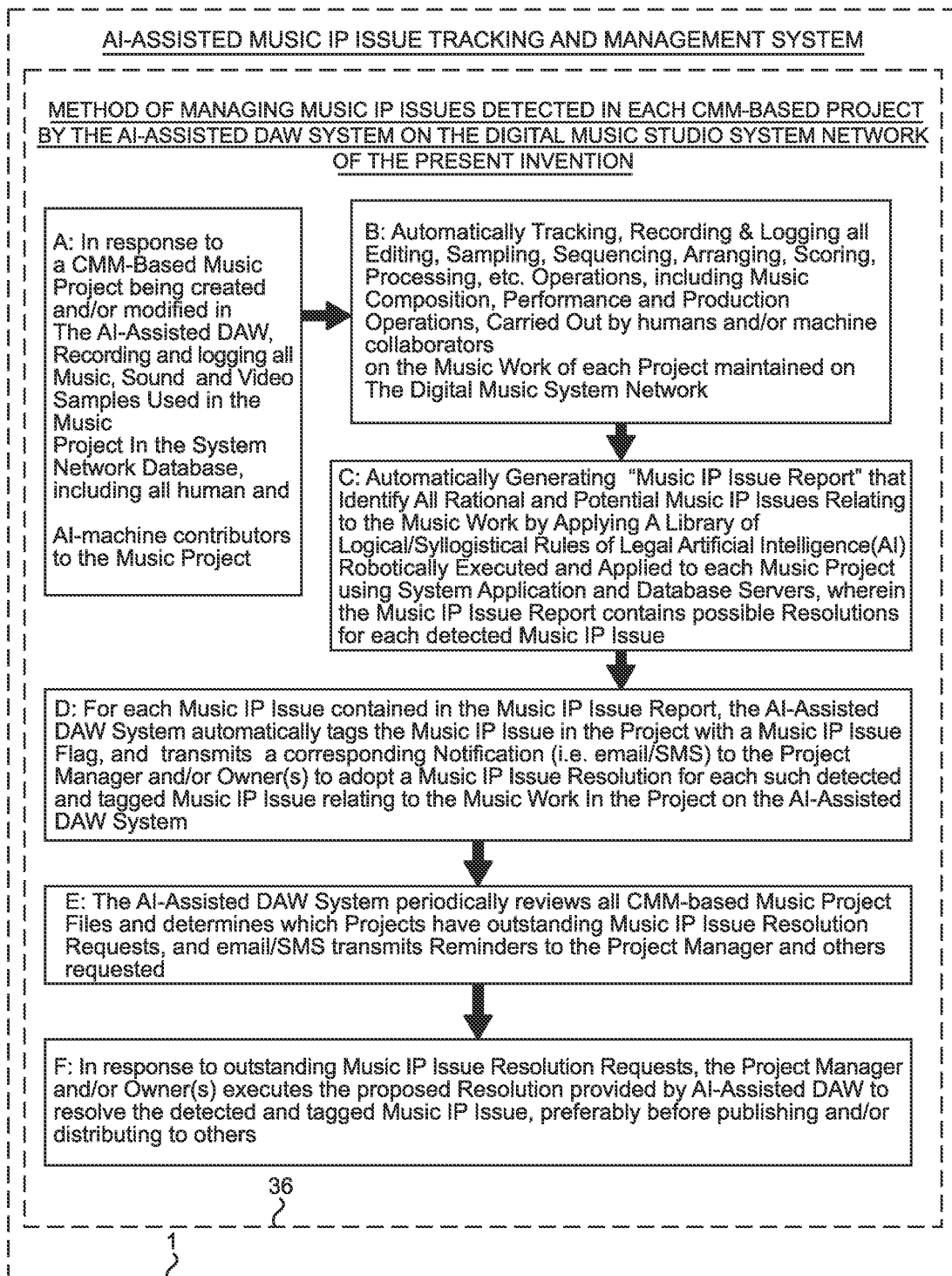


FIG. 92A

**FIG. 93**

**METHOD OF GENERATING AND MANAGING COPYRIGHT RELATED INFORMATION
PERTAINING TO A MUSIC WORK IN A PROJECT ON THE AI-ASSISTED DAW SYSTEM
OF THE PRESENT INVENTION**

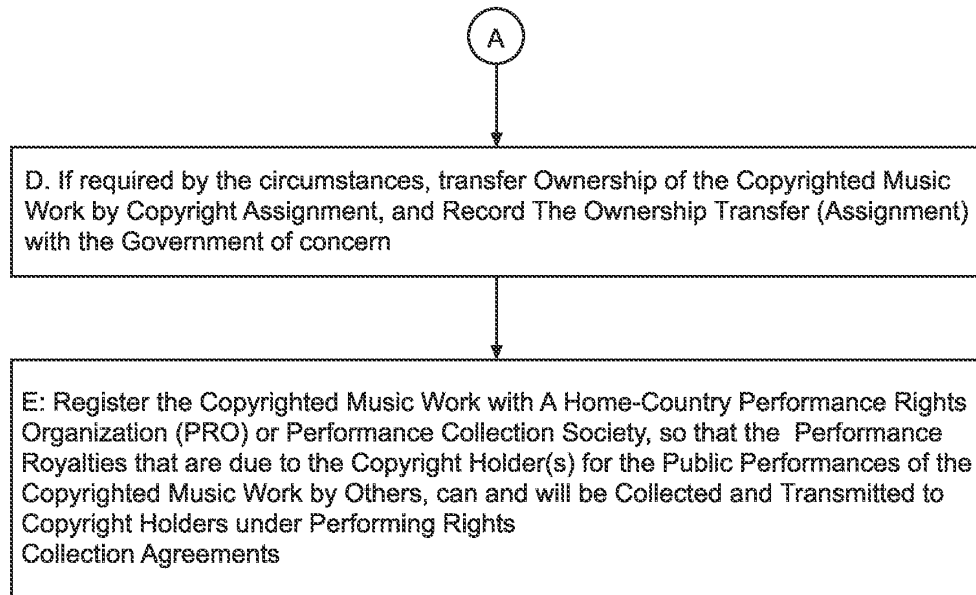
A: Using an AI-Assisted Digital Audio Workstation (DAW) System to automatically and transparently track, record, log and analyze all assets and activities that may occur with respect Music Work in a Project in the AI-Assisted DAW System on the System Network, including when and how system users (i.e. collaborating human and machine artists, composers, performers, and producers alike) made use of specific AI-assisted tools supported in the DAW System during various the stages of the music project, including music composition, digital performance, production, publishing and distribution of produced music over various channels around the world, wherein the AI-Assisted DAW System supports the use of AI-assisted automated Music Project tracking and recording services including automated tracking and logging the use of (i) all AI-assisted tools on a particular Music Project supported in the user's AI-Assisted DAW System, music and sound samples selected, loaded, processed, and/or edited in the AI-Assisted DAW System, and (ii) all Plugins, Presets, MICs, VMIs, Music Style Transfer Transformations and the like supported on the System Network and used in any aspect of the Music Project;

B: Using the AI-Assisted DAW System to Generate a Copyright Registration Worksheet (See FIG. 95) for Help And Use Correctly Registering a Claimant's Copyright Claims in A Music Work in a Project on The AI-Assisted DAW System

C: Using the Copyright Registration Worksheet to apply for a Copyright Registration to a Music Work in a Project on AI-Assisted DAW, and then Record the Certificate of Copyright Registration in the DAW System once the Certificate of Registration Issues from the Government with legislative power over copyright registration in the country of concern

B

FIG. 94A

**FIG. 94B**

EXEMPLARY COPYRIGHT REGISTRATION WORKSHEET GENERATED FROM THE AI-ASSISTED
DAW SYSTEM FOR USE WHEN REGISTERING A CLAIMANT'S COPYRIGHT CLAIMS
IN A MUSIC WORK IN A PROJECT ON THE AI-ASSISTED DAW SYSTEM

Project: Name and Project ID
Music Work: Title of Work ABC
Date of Completion: Year, Month, Date
Published or Unpublished: XXXX
Nature of Music Work: Music Composition (Score and/or MIDI Production) Music without Lyrics; and Music Performance Recording with Instrumentation (Sound Recording formatted in .mp3)
Authors: Names/Addresses of All Human Contributors to Music Work In the Project
Name of Copyrights Claimant(s): Copyright Owner(s) [Legal entity name]
First Country of Publication: USA
AI-Assisted Music Composition Tools Employed on Music Work; where used to produce what part in the Music Composition
AI-Assisted Music Performance Tools Employed on Music Work; where used to perform what part in the Music Performance
AI-Assisted Music Production Tools Employed on Music Work; where used to produce what effect, part and/or role in the Music Production
Available Deposit(s) of The Music Work: Music Score Representation in (.sib), and Digital Music Performance arranged and orchestrated with Virtual Music Instruments (.mp3)

SYLLOGISTICAL/LOGICAL RULES OF LEGAL-AI USEFUL FOR WHEN
PROJECT MANAGER AND/OR ATTORNEYS USE THE COPYRIGHT REGISTRATION
WORKSHEET TO FILE APPLICATION ONLINE AT US COPYRIGHT OFFICE PORTAL
<https://www.copyright.gov/registration/> TO (i) SEARCH COPYRIGHT RECORDS;
REGISTER A CLAIMANT'S CLAIMS TO COPYRIGHTS IN A MUSIC WORK IN A
PROJECT; RECORD COPYRIGHT ASSIGNMENTS; AND SECURE CERTAIN
STATUTORY LICENSES

RULE#1: IF Contributors are Not the Copyright Claimants, then Name the Legal Entity As Claimant of Copyrights Ownership in and to the Music Work, THEN Determine if The Music Work was a Work for Hire in Copyright Act of 1976 As Amended (i.e. all Contributors were employees of Copyright Claimant); and if so, THEN the Owner can be Named as the Copyright Claimant and "Author" of the Music Work in an Online US Copyright Application, at the time of online US Copyright Registration;

RULE#2: IF Music Work was not a Work For Hire, and Claimant is to be Legal Entity Owner, THEN Contributors should (i) assign their Copyrights to the Legal Entity by Copyright Assignment by executing a proper Copyright Assignment Document and recording it in US CRO, and (ii) in the Copyright Registration Application, naming the Contributors as original "Authors", and the Legal Entity named as Copyright Claimant, and providing a clear Indication that the Claimant has acquired Ownership to the Copyrights in the Music Work by a transfer of copyright ownership (i.e. achieved by checking the "Transfer by Agreement" Box in the Online US Copyright Registration Application)

RULE#3: IF Music Work is a Music Composition, THEN produce and upload to US CRO a digital graphic file of the Music Score Representation of the Music Composition.

FIG. 95