

51 Musical instruments

51a Organs and harmoniums

51b Pianos

51c Orchestral instruments, plucked instruments, harmonicas, accordions and the like

51d Mechanical music players

51e Music teaching and accessory devices

51f Musical instruments with electrical tone generation

51a Organs and harmoniums

- 51a-1/01 Organ structure in general
- 51a-1/02 Swell devices, stress
- 51a-1/03 Tremolo and transposing devices
- 51a-1/04 Just intonation
- 51a-2/01 Electrically operated organs
- 51a-2/02 Electropneumatically operated organs
- 51a-2/03 Electrical recorders
- 51a-3/01 Blowing devices for organs and harmoniums
- 51a-3/02 Mechanical blowing devices
- 51a-3/03 Control of air supply
- 51a-4/01 Harmoniums
- 51a-4/02 Cases, resounding bodies
- 51a-5 Harmonium-like instruments
- 51a-6/01 Stops
- 51a-6/02 Couplers
- 51a-6/03 Prepared stop combinations
- 51a-7 Mechanical wind chests for organs and harmoniums
- 51a-8 Pneumatic wind chests for organs and harmoniums
- 51a-9 Valves and valve arrangements for organs and harmoniums
- 51a-10/01 Flueworks
- 51a-10/02 Reedworks
- 51a-10/03 Reeds and reed boards

51b Pianos (with electrical tone production 51f)

- 51b-1/01 Piano structures in general
- 51b-1/02 Unusual piano forms, double pianos
- 51b-2/01 Frames and supports
- 51b-2/02 Tuning boards
- 51b-3/01 Piano cases (as articles of furniture 34i)
- 51b-3/02 with sound flaps
- 51b-3/03 with music desk
- 51b-3/04 with music holder
- 51b-3/05 with miscellaneous devices, such as foldable keyboards, keyboard covers, movable upper case walls and connections thereof with keyboard covers

Resonance apparatus for pianos

- 51b-4 Sounding boards in general (51c-4)
- 51b-5 Double sounding boards

- 51b-6 Auxiliary sounding boards
- 51b-7 Resonators
- 51b-8 Sounding board bridges
- 51b-9 Ribs and the like for sounding boards
- 51b-10 Fastening and mounting of sounding boards
- 51b-11 Clamping devices for sounding boards
- 51b-12 Materials for, and treatment of, sounding boards

- Strings and tuning apparatus for pianos**
- 51b-13 Strings
- 51b-14 Tuning pins in alignment with the strings
- 51b-15 Tuning pins transverse to the strings
- 51b-16 Miscellaneous tuning apparatus, other than tuning pins (51c-8/02)

- Keyboards and the like for pianos**
- 51b-17 Keyboards comprising means for sustaining the tone, chord indicators and children's keyboards
- 51b-18 Touch regulators
- 51b-19 Multistep keyboards
- 51b-20 Dummy keyboards, position and shape of the keys, keyboard mounting and connection with the action
- 51b-21 Transposers and the like
- 51b-22 Octave couplers for pianos

- Piano and grand piano actions**
- 51b-23 Hammer heads for piano actions
- 51b-24 Piano actions in general
- 51b-25 Piano actions with suspended jacks
- 51b-26 Piano actions with checks mounted upon the jacks
- 51b-27 Piano actions with special damping devices
- 51b-28 Piano actions with unusual devices
- 51b-29 Grand piano actions in general
- 51b-30 Grand piano actions with inverted jacks
- 51b-31 Grand piano actions according to the Erard system

- Pedal mechanism for pianos**
- 51b-32 Apparatus for modifying the tone, harp stops for pianos
- 51b-33 Piano and forte devices for pianos
- 51b-34 Pedals and pedal boards for pianos

- Special tone production methods for pianos**
- 51b-35 Playing pedals for pianos, foot keyboards
- 51b-36 Harp pianos
- 51b-37 Piano violins (51c-3/02; 51d-24)
- 51b-38 Pianos with sustenuto devices
- 51b-39 Pianos combined with harmoniums
- 51b-40 Pianos with sounding forks, plates, bells, or the like
- 51b-46 Devices for supporting the fingers and arms of piano player
- 51b-47 Devices for the strengthening of the fingers and arms of piano player
- 51b-48 Tools, machinery, e.g. drilling machines and miscellaneous devices used in piano construction, not covered by 51b-1 – 51b-47

51c Orchestral instruments, plucked instruments, harmonicas, accordions and the like**Stringed [bow] instruments: violins and the like**

- 51c-1/01 General structure of stringed instruments
- 51c-1/02 Treatment of the resonating wood (38h)
- 51c-2 Unusual forms of stringed instruments
- 51c-3/01 Accessories for stringed instruments
- 51c-3/02 Finger boards and frets
- 51c-3/03 Bow guide
- 51c-3/04 Cello picks and cello rests
- 51c-3/05 Rosin containers
- 51c-3/06 Violin cases
- 51c-4 Sounding boards and resonators, horns, diaphragms (51b-4 – 51b-12)
- 51c-5 Sound posts and bass bars
- 51c-6/01 Strings and string protection
- 51c-6/02 Tailpieces
- 51c-7/01 Bridges
- 51c-7/02 Mutes
- 51c-8/01 Tuning pegs
- 51c-8/02 Fine tuning devices and tune changers
- 51c-9 Bows
- 51c-10 Violin supports, shoulder and chin rests
- 51c-11 Keyboards and other devices for playing stringed instruments (51b-37; 51d-24),
insofar as the sound sequence is controlled by the player only; also breaking in
stringed instruments
- 51c-12 Bowed zithers

Plucked string instruments; harps, zithers, and the like

- 51c-13 Harps
- 51c-14/01 Mandolins
- 51c-14/02 Guitars
- 51c-14/03 Banjos
- 51c-14/04 Finger board key arrangements and accessories, capo teste, grips for plucked
instruments (51c-3/02)
- 51c-15 Zithers in general
- 51c-16 Zither elements: finger boards, rings, mutes, supports, flageolet-imitating
- 51c-17 Plucking and striking devices for zithers: keyboards, tremolo devices
- 51c-18 Zithers with bells, reeds, music sheets, and the like
- 51c-19 Autoharps with damper bars
- 51c-20 Autoharps with plucking arrangements

Wind instruments

- 51c-23/01 Ordinary orchestral woodwind instruments: flutes, oboes, clarinets, bassoons
- 51c-23/02 Saxophones
- 51c-23/03 Ocarinas
- 51c-23/04 Mouthpieces and reeds
- 51c-24/01 Brass wind instruments
- 51c-24/02 Mouthpieces
- 51c-24/03 Mutes
- 51c-25/01 Rotary valves
- 51c-25/02 Piston valves
- 51c-26 Toy trumpets, whistles, and the like (51d-23; 74d-1)

Harmonicas and accordions

- 51c-27/01 General structure of harmonicas (mechanical 51d-13)
- 51c-27/02 Production processes: riveting and milling devices (49g-15; 49b-1)
- 51c-28 Multiple harmonicas
- 51c-29 Harmonicas with blowing pipe and movable mouthpieces
- 51c-30 Accordions, in general (mechanical 51d-22)
- 51c-31 Accordion stops
- 51c-32 Bellows and fastening devices for accordions
- 51c-33 Accordion actions
- 51c-34 Double keyboards and special key arrangements for accordions
- 51c-35 Accordions with bells, flutes, drums, etc.

Miscellaneous musical instruments

- 51c-36/01 Drums and supports
- 51c-36/02 Drums and snares
- 51c-36/03 Beating devices for drums
- 51c-37 Kettledrums
- 51c-38/01 Miscellaneous musical instruments
- 51c-38/02 Instruments with sound plates and sound tubes; glockenspiels, gongs, xylophones
- 51c-38/03 Cymbals
- 51c-38/04 Aeolian harps

51d Mechanical music players

- 51d-1 Automatic players, orchestrions

Barrel organs, hurdy-gurdies

- 51d-2 Barrel organs with pin cylinders and pin boards
- 51d-3 Barrel organs with perforated note sheets and drop levers, general structure
- 51d-4 Barrel organs with perforated note sheets and drop levers, valve arrangements
- 51d-5 Barrel organs with perforated note sheets and striking blocks
- 51d-6 Barrel organs with disks, general structure and driving mechanism
- 51d-7 Barrel organs with disks, shifting of axes and disks of different diameters

Mechanical music players comprising combs or music boxes

- 51d-8 Mechanical music players comprising combs or music boxes, general structure and sound producing elements
- 51d-9 Devices for replacing and shifting the music cylinders in music boxes
- 51d-10 Devices for automatically replacing the music disks in mechanical players with combs
- 51d-11 Resetting and stopping devices for music boxes
- 51d-12 Striking mechanism for combs comprising star wheels and levers
- 51d-13 Striking mechanism for combs with levers only
- 51d-14 Miscellaneous striking mechanisms for combs
- 51d-15 Dampers for striking mechanisms with star wheels, edge or other damping
- 51d-16 Dampers for striking mechanisms with star wheels, surface or other damping, exclusive of edge damping (51d-15)
- 51d-17 Dampers for striking mechanisms with edge, surface, or other damping
- 51d-18 Speed controls for mechanical players (60-8)
- 51d-19 Chimes and sounding plate mechanism, mechanical players with a variety of sound elements
- 51d-20 Electrically operated mechanical players, and coin-controlled players (43b-38/01)
- 51d-21 Music disks and cylinders
- 51d-22 Mechanical accordions (51c-30 – 51c-35)
- 51d-23 Mechanical harmonicas (51c-27/01 – 51c-29), musical toys, rattles and the like
- 51d-24 Mechanical bowed instruments (51b-37; 51c-3/01)

- 51d-25 Mechanical players in which the strings are struck
- 51d-26 Mechanical players in which the strings are plucked
- Mechanical players for keyed instruments**
- 51d-27 Mechanical player devices with pin cylinders and pin boards
- 51d-28 Mechanical player devices with perforated note sheets and mechanical driving mechanisms
- 51d-29 Devices for controlling stress and expression in mechanical players with perforated note sheets and mechanical driving mechanisms
- 51d-30/01 Electrically operated mechanical players
- 51d-30/02 Electrical players with rotary friction cylinders
- 51d-30/03 Stress devices for electromechanical players
- 51d-31 Mechanical players with pneumaticomechanical driving mechanisms
- 51d-32/01 Mechanical players for pianos and grand pianos with pneumatic driving mechanisms
- 51d-32/02 Mechanical players for organs and harmoniums
- 51d-32/03 Wind chests
- 51d-32/04 Removable attachments in front of, or on, the keyboard
- 51d-32/05 Pump and pedal mechanism for pneumatic players
- 51d-32/06 Wind supply motors
- 51d-32/07 Valves
- 51d-32/08 Miscellaneous elements and devices
- 51d-33/01 Pneumatic stress devices
- 51d-33/02 Stress controlled by hammer stroke variation
- 51d-33/03 Single stress
- 51d-33/04 Change of tempo and expression
- 51d-33/05 Change of wind pressure by hand
- 51d-33/06 Change of wind pressure by means of note sheets
- 51d-33/07 Various elements used for stressing

Devices for mechanical players

- 51d-34/01 Note sheet drive
- 51d-34/02 Note sheet guides
- 51d-34/03 Sliding blocks, general
- 51d-34/04 Multiple sliding blocks
- 51d-34/05 Transposition devices
- 51d-34/06 Pressure regulators
- 51d-35/01 Note sheet winding and rewinding
- 51d-35/02 Devices for humidity adjustment
- 51d-35/03 Production and structure of note sheets (51e-4, 51e-5; 7c-31)
- 51d-35/04 Note sheet rolls
- 51d-35/05 Playing devices with note sheet magazines
- 51d-35/06 Synchronising devices in connection with film strips
- 51d-36 Mechanical players with endless note sheets
- 51d-37 Mechanical players with spiral or sectional note sheets

51e Music teaching and accessory devices**Music teaching devices and the like**

- 51e-1 Time-counters and timing devices for music: beat indicators, metronomes, batons
- 51e-2 Tuning forks and other devices for giving the pitch
- 51e-3/01 Fixed note indicators for keyboards
- 51e-3/02 Moving note indicators for keyboards, shifting note sheets
- 51e-4 Purely mechanical apparatus for recording played music, music sheet punching machines (7c-31)

- 51e-5 Electric apparatus for recording played music, music sheet punching machines (7c-31)
- 51e-6/01 Miscellaneous teaching devices (51c-3)
- 51e-6/02 Music boards
- 51e-6/03 Music boards with sounding note-markings
- 51e-6/04 Transposition dials and slides

Music holders, sheet turners, and the like (70d-9)

- 51e-7/01 Music sheet holders and fasteners
- 51e-7/02 Music desks (51e-8; 34i-8)
- 51e-8 Music stands (51e-7; 34i-15)
- Music sheet turners
 - 51e-9/01 with latches
 - 51e-9/02 with anchor latches
 - 51e-9/03 with rotary latches
 - 51e-9/04 with clockworks
 - 51e-10/01 with several turning arms, each of which is turned by a handle or key
 - 51e-10/02 by single handles or sheet fastener
 - 51e-10/03 with shifted toothed or friction segments or racks
 - 51e-10/04 with helical gearing
 - 51e-10/05 with push turner
 - 51e-10/06 with turning arm and deflected pawl
 - 51e-10/07 with turning arm and advancing sheets
 - 51e-10/08 Rotary turners with progressive actuators
 - 51e-10/09 Rotary turners with cord or wire pull
 - 51e-10/10 with turning arm forward and backward turners
 - 51e-11/01 with lifting fingers
 - 51e-11/02 Miscellaneous sheet turners and elements
 - 51e-12/01 Magnetically or electrically operated
 - 51e-12/02 Suction or pneumatic operated
- 51e-13 Miscellaneous auxiliary devices, tools, stands

51f Musical instruments with electrical tone generation

Instruments with tone generation by amplified or unamplified current pulses

- 51f-1/01 General, driving mechanisms, tone changing devices, auxiliaries for playing, etc.
- 51f-1/02 with mechanical switches (51f-3/02, 51f-3/03)
- 51f-1/03 with photoelectric switches
- 51f-1/04 with inductive tone generation, alternating-current machines

Instruments with tone production by electrical oscillator circuits

- 51f-2/01 General playing accessories, vibrato production, etc.
- 51f-2/02 Low-frequency tube oscillators
- 51f-2/03 Low-frequency relaxation oscillator circuits, glow lamps, (relaxation oscillations, general 21g-38, 21a1-36/06; for additional special purposes 21e-28/02; 21a1-35/21, 74d-8/04, 74d-8/54; 83d-5)
- 51f-2/04 Beat generators
- 51f-2/05 Self- [pulse] modulation of carrier waves

Instruments with sounding bodies

- 51f-3/01 General
- 51f-3/02 Electrically energised sounding bodies, i.e. strings, electrical pianos
- 51f-3/03 Augmentation by electrical feedback or automatic interrupter, respectively
- 51f-3/04 Instruments with acoustic feedback

- 51f-3/05 Mechanically struck sounding bodies with microphones (pickups) and loudspeakers, damped instruments
- 51f-3/06 Mechanical filters, sounding bodies, e.g. sounding boards as loudspeakers
- 51f-4 Sound synthesis