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(54) **METHODS AND FORMATS FOR VISUALLY EXPRESSING MUSIC**

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(57) **ABSTRACT**

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A method for visually expressing music includes marking a region of a staff to identify a musical note's pitch, wherein the staff includes four lines each of which is parallel or substantially parallel to the other three lines, and each of which defines at least three regional positions where a mark can be made to identify a musical note's pitch, wherein the staff includes at least twelve regional positions and each of the at least twelve regional positions corresponds to a unique pitch of a musical note within a musical octave. The method also includes marking the region of the staff to also identify the duration of the musical note. With at least twelve regional positions defined by the staff, each of the 12 pitches in an octave can have a position within the staff that uniquely identifies the pitch of the note. Furthermore, the staff can span exactly the twelve pitches in an octave to allow one to quickly identify the pitch of the note being visually expressed without having to memorize each position and its associated pitch in the staff. In addition, each pitch in an octave can be identified by numbers (1-N). Western music using 12 notes would have the following 12 Arabic numerals, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

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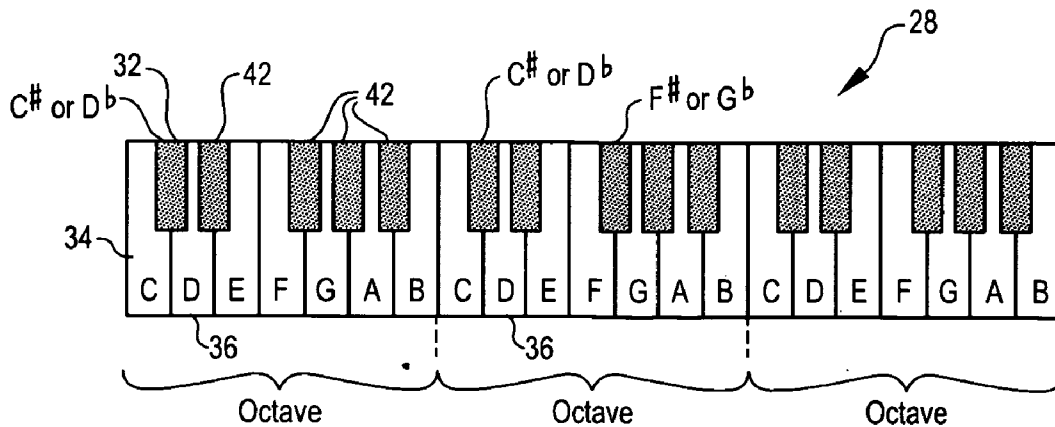


FIG. 1

PRIOR ART

FIG. 1 illustrates a musical score for a prior art system, labeled 'PRIOR ART'. The score is divided into four systems, each consisting of a vocal line (treble clef, 16) and a piano accompaniment line (bass clef, 18). The lyrics are: "Twin - kle, twin - kle, lit - tle star how I won - der what you are." The first system includes a 4-measure rest (4 *on*) in the piano part. The second system shows dynamic markings *f* and *p*, and a 24-measure rest in the piano part. The third system shows a 25-measure rest in the piano part. The fourth system shows a melodic line with notes E, F, G, A, B, C, D, E (30) and A, G, F, E, D, C, B, A (30). Annotations include 12, 14, 20, 22, 24, 25, 26, 27a, 27b, 27c, 27d, 38, 40, 41, 43, 44, 46, and 48.

FIG. 2

FIG. 2 illustrates a piano keyboard layout. The keyboard is divided into three octaves, each labeled "Octave" and numbered 36. The notes are labeled C, D, E, F, G, A, B. Shaded keys are labeled C# or Db, and unshaded keys are labeled C, D, E, F, G, A, B. Annotations include 28, 32, 34, 36, 42, and 48.

FIG. 5

FIG. 5 illustrates three systems of musical notation on a five-line staff. Each system begins with a '5' on the first line. The notes are eighth notes with stems pointing up. The first system has a bracket labeled '102' under the first two notes. The second system has a bracket labeled '100' under the first two notes and a bracket labeled '106' under the next two notes. The third system has a bracket labeled '104' under the first two notes. The notation is organized into four measures per system.

FIG. 6

FIG. 6 illustrates three systems of musical notation on a five-line staff in 4/4 time. The notation uses numbers for fingerings and 'x2' for doublets. The first system is marked with a 4/4 time signature and includes fingerings: 1 1, 8 8, 10 10, 8x2, 6 6, 5 5, 3 3, and 1x2. The second system includes fingerings: 8 8, 6 6, 5 5, 3x2, 8 8, 6 6, 5 5, and 3x2. The third system includes fingerings: 8 8, 10 10, 8x2, 6 6, 5 5, 3 3, and 1x2. The notation is organized into four measures per system.

FIG. 7

Alphabet Song

The musical score for 'Alphabet Song' is presented in piano format, consisting of four systems of two staves each. The music is written in a common time signature (C) and a key signature of one flat (B-flat). The melody is primarily composed of quarter and eighth notes, with some rests. The accompaniment features chords and single notes, often using a simple harmonic structure. The piece concludes with a double bar line and repeat dots.

FIG. 8

Beat Unit Comparison

Comparing Current Music Notation to NN Beats Per Measure Timing

2 2

 $1/2 + 1/2 + 1$

2 2

 $1/4 + 1/4 + 1/4 + 1/4 + 1$

2 2

 $1/2 + 1/4 + 1/4 + 1$

2 2

 $1/4 + 1/4 + 1/2 + 1$

2 2

 $1/4 + 1/2 + 1/4 + 1$

2 2

 $1/2 + 1/4 \quad 1/4 + 1$

2 2

 $1/4 + 1/2 + 1/4 + 1$

2 2

 $1/2 + 1 + 1/2$

2 2

 $1 + 1/2 + 1/2$

2 2

 $1/2 + 1 + 1/2$

FIG. 9

Eighth and Sixteenth note comparison

*Number symbol (#) used in place of pitch number 1-12 for C.P.M examples
In C.P.M the fractionalized values or single note durations equal 2.

2 C.P.M = $1/2 + 1/2 + 1$

2 C.P.M = $1/2 + 1/2 + 1/2 + 1/2 + 1$

2 C.P.M = $1/2 + 1/4 + 1/4 + 1$

2 C.P.M = $1/4 + 1/4 + 1/2 + 1$

2 C.P.M = $1/4 + 1/2 + 1/4 + 1$

2 C.P.M = $1/2 + 1/4 + 1/4 + 1$

2 C.P.M = $1/4 + 1/2 + 1/4 + 1$

2 C.P.M = $1/2 + 1 + 1/2$

2 C.P.M = $1 + 1/2 + 1/2$

2 C.P.M = $1/2 + 1 + 1/2$

FIG. 10

Values shorter than a beat comparison

Current Music Notation

	1	2	3	4	1	2	3	4	1	2	3	4
4	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩
4	1/4	1/4	1/4	1/4	1/8	1/8	1/16	1/16	1/16	1/16	1/16	1/16
											o	
											1	

NN... "Counts Per Measure" Timing

	1	2	3	4	1	2	3	4	1	2	3	4
4 C.P.M	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩	♩
	1	1	1	1	1/2	1/2	1/4	1/4	1/4	1/4	1/4	1/4
											#x4	

FIG. 11

Notes and Rests Comparison

Current Music Notation

	1	2	3	4	1	2	3	4	1	2	3	4
4			-		♩	♩	♩	♩	♩			-
4												

NN... "Counts Per Measure" Timing

	1	2	3	4	1	2	3	4	1	2	3	4
4 C.P.M	o	x4			#	o	#	o	#x2		o	x2

METHODS AND FORMATS FOR VISUALLY EXPRESSING MUSIC

CROSS REFERENCE TO RELATED APPLICATION AND CLAIM OF PRIORITY

[0001] This application claims priority from commonly owned, currently pending U.S. Provisional Patent Application 61/204,301, filed 5 Jan. 2009, and titled “Numbered Notes”, which is incorporated by reference.

BACKGROUND

[0002] Music is a collection musical notes arranged by a composer to convey information and/or emotion to another person—one listening to the music. Each musical note is identified within the music by three pieces of information, the note’s pitch, duration, and timing relative to the other musical notes within the music. A note’s pitch is the frequency of the sound that one hears; not the unique sound itself. A piano and a trumpet can each generate a sound having the same frequency (pitch) but the sounds generated will not be perceived by a listener as the same. The sounds will not be perceived as the same because one sound is generated from a vibrating string (the piano), and the other sound is generated from a vibrating lip (the trumpet). A note’s duration is the length of time that the sound exists. And, a note’s timing is the temporal location within the music, i.e. when the sound is generated relative to when the sounds of the other notes in the music are generated.

[0003] Because music is a collection of notes that are heard by a listener, music is ephemeral—after the music is heard it’s gone. To make music more permanent, and thus allow one to hear the music at a later date, such as centuries after the music was first composed, music is recorded on a more permanent medium. For many, many years the only medium available was a medium on which music was visually, not aurally, expressed, such as paper. Thus, a system or format for visually expressing music has developed.

[0004] Currently, the system or format includes a grand staff on which ovals and other marks are drawn to provide the three pieces of information that identify a musical note within music. An example of the current system or format for visually expressing music can be found in FIG. 1, which shows a well-known musical piece—Twinkle, Twinkle Little Star **10** and some additional visual expressions **12** for music. The conventional format shown includes a grand staff **14** which has two five-line staves **16** and **18**, connected to each other, one for the treble clef **20**, and the other for the bass clef **22**. The conventional format also shows notes **24** (48 shown but only five labeled with a reference number for clarity) as ovals **25** (only two labeled for clarity), and rests **26** as a variety of marks. The vertical position of the each oval **25** in each staff **16** and **18** determines the pitch of the note **24**, the horizontal position of each oval **25** in each staff **16** and **18** identifies when the note **24** is played relative to other notes **24**, and a variety of marks **27** identify the duration of the note **24**. Moreover, the current system or format groups musical notes into octaves, and includes seven different names (A, B, C, D, E, F and G) for twelve different pitches within the octave. FIG. 2 is a plan view of a portion of a piano’s keyboard **28** and shows 3 octaves of notes **24** (FIG. 1) each of which is labeled with one of the seven letters.

[0005] This current system is a legacy from a period in time when the octave only had 7 notes (A-G) and 7 positions on the

staff. Each note had its own name and position on or between each line. It was a logical design for 7 notes. The additional 5 notes were added later in history to accommodate more sophisticated harmonies but the system was not redesigned, thus giving us a staff and naming convention that was designed for 7 notes but tasked to handle 12 notes. Instead of renaming the notes and redesigning the staff, sharp and flat accidental symbols were used to augment the system. Thus leaving us with our current music notation system that uses 7 letter names with 7 positions to name and place 12 notes.

[0006] Unfortunately, the current system or format for visually expressing music can be very confusing, and thus learning to play and understand music can be more difficult than it really is. As shown in FIG. 1, an octave **30** of pitches spans a portion of each staff **16** and **18**, not the whole staff. In other words, each of the staves **16** and **18** spans more than one octave but less than two octaves. Thus, for each pitch one has to memorize the location of the oval **25** in the staff **16** or **18** that identifies the pitch, and the location of the oval **25** that identifies the pitch’s octave. In addition, within an octave **30** there are only seven specific positions in each staff **16** and **18** to identify one of twelve pitches in the octave. As shown in FIG. 1, four of the positions are located on the lines of each staff **16** and **18**, and three of the positions are located in the spaces between the four lines. To identify the remaining five pitches a sharp accidental (#) or a flat accidental (b) is used in conjunction with one of the seven pitches. As shown in FIG. 2, the piano key **32**, when struck, makes a sound whose pitch is between C and D (the keys **34** and **36**). This note is shown on the five-line staff **18** of FIG. 1 as the note **38** that includes a sharp (#) adjacent the oval, but could also be shown as the note **40** that includes a flat (b) adjacent the oval. Thus, each of the remaining five pitches within an octave (the black keys **32** and **42** in FIG. 2) can be identified by either placing a sharp (#) adjacent the pitch that is immediately lower than itself, or a flat (b) adjacent the pitch that is immediately higher than itself. Consequently, trying to read the music visually expressed in FIG. 1 to play it on the keyboard **28** in FIG. 2 (or any other musical instrument) can be very difficult and take much time and effort to do quickly and accurately.

[0007] In addition, to identify a note’s pitch that is not identified by any of the positions in each of the staves **16** and **18** of the grand staff **14**, one adds lines and spaces either above or below the five-line staff **16** or **18** to establish the position that correctly identifies the note’s pitch. That is, each staff **16** and **18** includes positions for identifying a note’s pitch within a previously established range of notes, and to identify a note’s pitch that is not within the established range, one needs to add lines and spaces to the staff to establish the correct pitch-identifying position. This can be confusing if a piece of music includes notes from more than three octaves.

[0008] Also, the first position **41** in the bass clef’s staff **18** identifies the pitch for the note A, and the first position **43** in the treble clef’s staff **16** identifies the pitch for the note E. Because pitch-identifying positions for each staff are different when compared to each other, one must learn the pitch-identifying positions for both staves **16** and **18**. This requires additional time and effort to learn, and can cause frequent mistakes in the note’s pitch when reading the music.

[0009] In addition, the different marks **27** used with the ovals **25** to identify the duration of a note’s pitch, or the duration of a rest **26**, are not sequenced logically. For example, a whole note **27a** is a hollow oval that does not include a staff **44**; a half note **27b** is a hollow oval that does

include a staff **44**; a quarter note **27c** is a solid oval that includes a staff **44**; and an eighth note **27d** is a solid oval that includes a staff **44** and a flag **46**. Similarly, a whole rest is a sold rectangle hanging from a line of a five-line stave; a half rest is a sold rectangle resting on a line of a five-line stave; a quarter rest is squiggle line; and an eighth rest is a staff with a flag. Because there is no logical pattern in the markings of the notes that identify duration, and no logical pattern in the markings of the rests that identify duration, one must simply memorize each of the markings and their associated duration.

SUMMARY

[0010] In one aspect of the invention, a method for visually expressing music includes marking a region of a stave to identify a musical note's pitch, wherein the stave includes four lines each of which is parallel or substantially parallel to the other three lines, and each of which defines at least three regional positions where a mark can be made to identify a musical note's pitch, wherein the stave includes at least twelve regional positions and each of the at least twelve regional positions corresponds to a unique pitch of a musical note within a musical octave. The method also includes marking the region of the stave to also identify the duration of the musical note.

[0011] Because the stave includes four lines, each of which defines at least three regional positions where a mark can be made to identify a musical note's pitch, the stave includes at least 12 regional positions. With at least twelve regional positions defined by the stave, each of the 12 pitches in an octave can have a position within the stave that uniquely identifies the pitch of a note. Furthermore, the stave can span exactly the twelve pitches in an octave to allow one to quickly identify the pitch of the note being visually expressed without having to memorize each position and its associated pitch in the stave. In addition, the stave for the treble clef and the stave for the bass clef can be consistent in the regional positions associated with each respective note with the only exception being a difference in the octave shown.

BRIEF DESCRIPTION OF THE FIGURES

[0012] FIG. 1 is a view of a piece of music visually expressed in a conventional format that includes a five-line stave.

[0013] FIG. 2 is a plan view of a portion of a piano's keyboard.

[0014] FIG. 3 is a view of musical notes and rests visually expressed in a format that includes a stave, according to an embodiment of the invention.

[0015] FIG. 4 is a plan view of a portion of a piano's keyboard that shows the piano key that corresponds to a note visually expressed in FIG. 3, according to an embodiment of the invention.

[0016] FIG. 5 is a view of a piece of well-known music visually expressed in a format shown in FIG. 3, according to an embodiment of the invention.

[0017] FIG. 6 is a view of the same piece of well-known music visually expressed in a format discussed in conjunction with FIG. 3, according to another embodiment of the invention.

[0018] FIG. 7 is a view of another piece of well-known music visually expressed in a format that includes a stave, according to yet another embodiment of the invention.

[0019] FIGS. 8-11 show comparisons of conventional visual expressions related to measures and beats within a

measure, to a format for visually expressing measures and beats within a measure, according to an embodiment of the invention.

DETAILED DESCRIPTION

[0020] FIG. 3 is a view of musical notes **60** and rests **62** visually expressed in a format **63** that includes a stave **64**, according to an embodiment of the invention. The stave **64** includes a unique regional position **66** for each respective pitch in a group of notes. In western music, the group is the eight-note octave that includes 12 different pitches. To provide a unique regional position **66** for each respective pitch in the octave, the stave **64** may include at least four lines. In other types/styles of music, the group of notes might have 16 notes, and include 16 pitches. In such a case, the stave **64** would include a unique regional position for each of the 16 respective pitches in the group. The format **63** also includes a mark **65** (fifteen shown but only three labeled with a reference number for clarity) that identifies the specific pitch of a note by the mark's regional position in the stave **64**, and another mark **67** (eleven shown but only four labeled with a reference number for clarity) that identifies the duration of the pitch to be generated.

[0021] Because the stave **64** includes a unique regional position **66** for each respective pitch in a group of notes, each pitch in the group of notes can be identified by a mark located in the unique regional position associated with the pitch. One no longer has to identify a specific pitch by locating a mark in a position of another pitch that is immediately above or below the specific pitch and then adding a sharp (#) or flat (b) accidental adjacent the mark like one would have to do to identify C[#] or D^b using the grand stave **14** shown in FIG. 1. Thus, one no longer has to provide a group of one or more sharps (#) and or flats (b) before the first note to provide the key signature of THE music for the person reading and/or playing the music. The key signature is basically an instruction to sharpen (#) or flatten (b) one or more specific notes identified throughout the music, and can be very confusing to a person who has not substantially studied music. In addition, the stave **64** can span exactly the twelve pitches in a group of notes to allow one to quickly identify the pitch of the note being visually expressed without having to memorize each position and its associated pitch in the stave **64**. Furthermore, a stave for the treble clef and a stave for the bass clef can be consistent in the regional positions associated with each respective note with the only exception being a difference in the octave shown.

[0022] The stave **64** can include any desired number of lines and define any desired number of regional positions **66**. For example, in this and certain other embodiments the stave **64** includes four lines **68**, each parallel to the others. Each line **68** locates three regional positions **66**. One regional position **66** is located immediately above a line **68**. Another regional position **66** is intersected by a line **68**, i.e. the regional position **66** includes a line **68**. And the third regional position **66** is located immediately below a line **68**. In this configuration, each space **70** that exists between each of the lines **68** includes two regional positions, each defined by a respective one of the two lines **68** bounding the space. In this manner, the stave **64** includes twelve unique regional positions, each associated with a respective one of the twelve pitches in an octave of notes.

[0023] Other embodiments are possible. For example the stave **64** can include 6 lines **68**, and six of the unique regional

positions associated with a respective one of the twelve pitches can be located on a respective one of the lines **68**, and another six of the unique regional positions can be located in a respective one of the spaces **70** between each of the six lines **68**. Another example, includes a staff **64** that defines any other number of unique regional positions **66** to correspond with a group of notes that has more than or fewer than 12 pitches in a group of notes.

[0024] Still referring to FIG. 3, the mark **65** that identifies a note's pitch can be any desired mark. For example, in this and certain other embodiments the mark **65** includes an oval that is solid, not hollow like the whole note **27a** in FIG. 1 or the half note **27b** in FIG. 1. Furthermore, identical solid ovals are used in different regional positions to identify the note's pitch that is associated with the respective regional positions. Thus, a person learning to read and/or play music is less likely to be confused by the variety of marks used in the conventional format shown in FIG. 1.

[0025] Other embodiments are possible. For example, the mark **65** can include an Arabic numeral, such as 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 that can be respectively associated with the notes conventionally named C, C[#], D, D[#], E, F, F[#], G, G[#], A, A[#] and B. In such embodiments, because the number also identifies the pitch of the note, the number's regional position in the staff **64** becomes redundant. By using numbers to identify a note's pitch, one can easily determine which notes comprise a chord **72**. A chord is simply two or more pitches generated at the same time. Chords are often recited as intervals from a root or how far apart a note is from the root note of the chord. For example, a most common interval is the Perfect 5th, which is C and G. Using numbers to identify the pitch of the notes in this chord, this chord becomes a 1+7 interval. Thus if you wanted to play the +7 interval of Root 1 you just add 7, and get 8.

[0026] Still referring to FIG. 3, the mark **67** that identifies the duration of the pitch to be generated can be any desired mark that follows a logical sequence. For example, in this and certain other embodiments, the mark **67** includes a staff **74** (four shown but only one labeled with a reference number for clarity) that extends vertically from the mark **65** that identifies pitch, and a flag **76** (four shown but only one labeled with a reference number for clarity). The specific duration of the note's pitch is identified by the number of flags **76** extending horizontally from the staff **74**. For example, a single flag **76** as shown in two of the notes **60** identifies the duration of each note as a half note. Two flags **76** as shown in one of the notes **60** identify the duration of the note as a quarter note; three flags **76** identify the duration of the note as an eighth note; four flags **76** identify the duration the note as a sixteenth note. A whole note is identified by the absence of a staff **74** and a flag **76**.

[0027] Other embodiments are possible. For example, the duration of a note's pitch can be identified by adding "x2", "x3" or "x" and the number of counts, which include major and minor beats, within the measure that the note is in next to the mark **65** that identifies the pitch, as shown in FIG. 7. The "x2" can identify the duration of the pitch to be two counts within the measure that the note is in. Similarly, the "x3" can identify the duration of the pitch to be three counts within the measure that the note is in.

[0028] Each count in a measure of music is either the one or more major beats within the measure or the one or more minor beats within the same measure, and each measure is assigned a specific number of single notes (see FIGS. 8-11). These single notes can be fractionalized (such as the notes that are marked with the flags **80** discussed in the next paragraph), left single (such as the notes identified by an Arabic numeral), or multiplied (such as the notes that are marked with an "x" followed by a number for the duration in counts of the measure). This allows for a wide variety of duration amounts and expresses the information in a literal manner. For example, in $\frac{1}{4}$ time the measure includes 4 counts with each quarter note in the measure receiving a single count. Thus, a half note in the measure would be identified by a "x2" adjacent the mark **65**; and a whole note in the measure would be identified by a "x4" placed next to the mark **65**. In this manner, unlike the convention format, the measure is not simply fractionalized ($\frac{1}{2}$ note, $\frac{1}{4}$ note, $\frac{1}{8}$ note, $\frac{1}{16}$ note, and $\frac{1}{32}$ note) to provide the correct duration for the notes in the measure but can also be multiplied, such as the half note above being identified by a "x2". Thus, the duration of the note's pitch is more clearly expressed in counts than the conventional format shown in FIG. 1. Still referring to FIG. 3, the rest **62** can be visually expressed using any desired mark. Furthermore, because a rest is the absence of sound, one only needs to identify the existence of the rest and its duration, not a variety of different pitches for the silence. For example, in this and certain other embodiments a rest **62** can be identified by a vertical line **78**, and one or more flags **80** horizontally extending from the vertical line. In this example, the rest **62** that includes two flags **80** is a quarter rest. The rest **62** that includes one flag **80** is a half rest. A rest **62** that includes three flags **80** is an eighth rest; a rest that includes four flags **80** is a sixteenth rest; and a rest that does not include a flag **80** is a whole rest.

[0029] Other embodiments are possible. For example, a rest **62** can be identified as "ø" and similar to the duration of a note's pitch, the duration of the "ø" rest can be identified by adding "x2", "x3" or "x" and the number of beats within the measure that the rest is in next to the vertical line **78** identifying the existence of a rest. The "x2" can identify the duration of the rest to be two beats within the measure that the rest is in. Similarly, the "x3" can identify the duration of the rest to be three beats within the measure that the rest is in. The rest can also be fractionalized with Binary Flags using the same conventions used for notes.

[0030] Still referring to FIG. 3, a mark **82** can be made adjacent the staff **64** to identify the octave that the staff **64** represents. The mark **82** can be any desired number. For example, in this and certain other embodiments, the mark is an Arabic numeral. To identify the middle octave or the octave that includes middle C, the number 4 is placed immediately adjacent and left of the staff **64**. To identify a single octave lower than the middle octave, the number 3 is placed immediately adjacent and left of the staff **64**. To identify a single octave above the middle octave, the number 5 is placed immediately adjacent and left of the staff **64**. If the musical piece spans more than one octave, one can either add another staff **64** above or below the first staff to indicate that the octave has increased or decreased, respectively, from the first staff. Or, one can place a number that is associated with a specific octave in the staff **64** at the location where the octave changes to indicate that the octave has changed. In other embodiments, a curved line (see FIGS. 5 and 6) can be used to

indicate a change in octaves and a number adjacent and above the curved line can indicate the new octave.

[0031] Still referring to FIG. 3, the format **63** can also include a mark **82** that identifies the key note of a piece of music. The key note of a piece of music is the note all of the other notes in the piece relate to, and can be used to develop note scales for the piece music. The mark **82** can be any desired mark. For example, in this and certain other embodiments the mark **82** includes a diamond with an Arabic numeral positioned inside to identify the specific note that is the key note for the piece. In other embodiments, the mark may be another geometric figure that has an Arabic numeral corresponding to the specific note of the key note positioned inside figure.

[0032] FIG. 4 is a plan view of a portion of a piano's keyboard **90** that shows piano keys **92** (36 shown but only two labeled with reference numbers for clarity) that correspond to respective notes as visually expressed in FIG. 3, according to an embodiment of the invention. In this and certain other embodiments, each note is visually expressed with a mark **65** (36 shown but only two labeled with reference numbers for clarity) that includes an Arabic numeral similar to the Arabic numeral marks discussed in paragraph **24** elsewhere herein. The marks **65** that do not include a horizontal line above or below the Arabic numeral identify notes in the middle octave. The marks **65** that include a horizontal line below the Arabic numeral identify notes in the octave immediately below the middle octave. The marks **65** that include a horizontal line above the Arabic numeral identify notes in the octave immediately above the middle octave.

[0033] When comparing the piano keyboard **90** in FIG. 4 to the piano keyboard **28** in FIG. 2, it is easy to see that uniquely identifying the black keys, or the five remaining pitches in an eight-note, twelve-pitch octave, can eliminate much confusion when learning to read and play music on a piano. One no longer has two different names for identifying the same pitch made by striking one of the black keys. For example, the note identified as 2 on the keyboard **90** could be identified as C[#] or D^b on the keyboard **28** in FIG. 2.

[0034] FIG. 5 is a view of a piece of well-known music—Twinkle, Twinkle Little Star—visually expressed in a format shown in FIG. 3, according to an embodiment of the invention. FIG. 6 is a view of the same piece of well-known music—Twinkle, Twinkle Little Star—visually expressed in a format discussed in conjunction with FIG. 3, according to another embodiment of the invention. The format used in FIG. 5 includes a solid oval **100** (42 shown but only one labeled with a reference number for clarity) located in one of 12 unique regional positions within the staff **102** to identify the note's pitch; while the format used in FIG. 6 includes an Arabic numeral to identify the note's pitch. The format used in FIG. 5 also includes a staff **104** and flag **106** (42 shown but only one labeled with a reference number for clarity) to identify the duration of each of the note's pitch, while the format used in FIG. 6 includes a "x2" or "x3" to identify the duration of each of the note's pitch. When compared to the same piece of music—Twinkle, Twinkle Little Star—visually expressed in FIG. 1 in a conventional format, it is easy to see how much clearer and cleaner the formats shown in FIGS. 5 and 6 are relative to the conventional format shown in FIG. 1.

[0035] FIG. 7 is a view of another piece of well-known music visually expressed in a format that includes a staff, according to yet another embodiment of the invention. Once

again, the format shown in FIG. 7 is very clear and clean, and thus much easier to learn and read than the conventional format shown in FIG. 1.

What is claimed is:

1. A method for visually expressing music, the method comprising:

marking a region of a staff to identify a musical note's pitch, wherein the staff includes four lines each of which is parallel or substantially parallel to the other three lines, and each of which defines at least three regional positions where a mark can be made to identify a musical note's pitch, wherein the staff includes at least twelve regional positions where a mark can be made to identify a musical note's pitch, and each of the at least twelve regional positions corresponds to a unique pitch of a musical note within a musical octave; and
marking the region of the staff to also identify the duration of the musical note.

2. The method of claim 1 wherein marking the region includes forming an oval in the region to identify a musical note's pitch.

3. The method of claim 1 wherein marking a region includes forming an Arabic numeral in the region to identify a musical note's pitch, wherein the Arabic numeral is at least one of the following group of numerals, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

4. The method of claim 1 wherein marking a region includes forming an Arabic numeral in the region to identify a musical note's pitch, wherein:

the Arabic numeral is at least one of the following group of numerals, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12; and
each one of the numerals corresponds to a respective one of the following identifiers of a musical note's pitch C, C[#], D, D[#], E, F, F[#], G, G[#], A, A[#] and B.

5. The method of claim 1 wherein the at least three regional positions of at least one of the four lines included in the staff includes a first position located below the line, a second position located on the line, and a third position located above the line.

6. The method of claim 1 wherein each of the at least twelve regional positions in the staff uniquely identifies a musical note's pitch when a mark is located in the regional position.

7. The method of claim 1 wherein marking the region to also identify the duration of the note includes extending at least one flag from the mark that identifies the pitch of the musical note.

8. The method of claim 1 wherein marking the region to also identify the duration of the note includes extending at least one flag from the mark that identifies the pitch of the musical note, wherein the number of flags corresponds to the duration of the musical note.

9. The method of claim 8 wherein a single flag corresponds to a half note's duration, and two flags corresponds to a quarter note's duration.

10. The method of claim 1 further comprising marking another region of the staff to identify a rest.

11. The method of claim 10 wherein marking the other region includes forming a line to identify the rest.

12. The method of claim 10 wherein marking the other region includes forming a line that intersects at least one of the four parallel lines of the staff, to identify the rest.

13. The method of claim 10 wherein marking the other region to identify the rest includes marking the region to also identify the duration of the rest.

14. The method of claim **10** wherein marking the other region to also identify the duration of the rest includes extending at least one flag from the mark that identifies the rest.

15. The method of claim **10** wherein marking the other region to also identify the duration of the rest includes extending at least one flag from the mark that identifies the rest, wherein the number of flags corresponds to the duration of the rest.

16. The method of claim **15** wherein a single flag corresponds to a half rest's duration, and two flags corresponds to a quarter rest's duration.

17. A format for visually expressing music, the format comprising:

a staff that includes four lines each of which is parallel or substantially parallel to the other three lines, and each of which defines at least three regional positions where a mark can be made to identify a musical note's pitch, wherein the staff includes at least twelve of the regional positions each of which corresponds to a unique pitch of a musical note within a musical octave; and

wherein the musical note's pitch is identified by a mark in one of the at least twelve regions of the staff, and the duration of the note is identified by another mark.

18. The format of claim **17** visually expressed on a sheet of paper.

19. The format of claim **17** wherein the mark that identifies the musical note's pitch includes at least one Arabic numeral from the following group of Arabic numerals, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.

20. The format of claim **17** wherein the mark that identifies the duration of the musical note includes at least one flag extending from the mark that identifies the pitch of the music's note.

21. The format of claim **17** wherein a rest is identified by another mark in a region of the at least twelve regions of the staff, and the duration of the rest is identified by yet another mark.

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