EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1785

DATE: AUGUST 1, 2025

PROJECT DP12695

The following classification changes will be effected by this Notice of Changes:

Action	**Subclass**	**Group(s)**
DEFINITIONS:		
Definitions Modified:	G06F	11/366
	G09G	SUBCLASS
	G09G	1/146
	G09G	3/001, 3/291, 3/292, 3/2922, 3/2925, 3/2927, 3/296, 3/2965, 3/3406, 3/3614
	G09G	5/001

No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following*:*

1. CLASSIFICATION SCHEME CHANGES
    - ☐ A. New, Modified or Deleted Group(s)
    - ☐ B. New, Modified or Deleted Warning(s)
    - ☐ C. New, Modified or Deleted Note(s)
    - ☐ D. New, Modified or Deleted Guidance Heading(s)
2. DEFINITIONS
    - ☒ A. New or Modified Definitions (Full definition template)
    - ☐ B. Modified or Deleted Definitions (Definitions Quick Fix)
3. ☐ REVISION CONCORDANCE LIST (RCL)
4. ☐ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. ☐ CHANGES TO THE CROSS-REFERENCE LIST (CRL)

2. A. DEFINITIONS (modified)

G06F11/366

Definition statement

Replace: The existing Definition statement with the following updated statement.

Subject matter related to software bugs after the software development phase. For example, a system crash during operation might be caused by a software bug. The system is diagnosed after the crash (or the failure) to find out where the bug was.

Insert: The following new Limiting references section.

References

Limiting references

This place does not cover:

Error or fault processing not based on redundancy, i.e. by taking additional measures to deal with the error or fault not making use of redundancy in operation, in hardware or in data representation	G06F11/0703

G09G

Relationships with other classification places

Replace: The existing Relationships text with the following updated text.

Subclass G09G covers electronic control of display characterised by the display device itself, whereas it does not cover:

- electronic control characterized by the pictorial communication, e.g. television, which is covered by subclass H04N, or
- aspects like rastering an image onto the target resolution by a raster image processor (RIP), or image enhancement aspects like augmented reality, which are covered by subclass G06T.

Subclass G09G does not cover software modules, e.g. software driver modules for the display, or their interaction, such as interaction between software modules related to the display of windows or interaction between a software driver module for the display and the operating system which are covered by group G06F9/00.

Special rules of classification

Replace: The existing Special rules text with the following updated text.

The Indexing Codes in this subclass are to be used for classifying additional information relevant for the invention.

Glossary of terms

Replace: The existing Glossary of terms table with the following updated table.

indicating device	display device
static means to display information	means not using movement of macroscopic parts for information build-up, e.g. displays using LCDs, LEDs, DMDs, ... for image build-up
to present	to display
variable information	information with variable content

Synonyms and Keywords

Replace: The text in the following one row in the existing Synonyms and Keywords table with the following updated text.

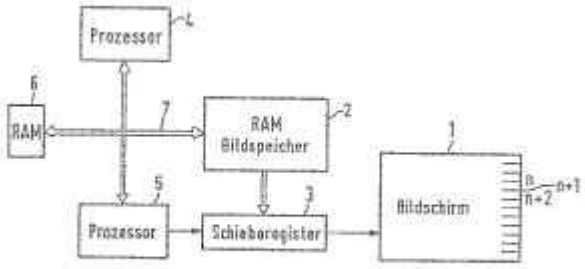
MEMS	Microelectromechanical systems

G09G1/146

Definition statement

Replace: The existing Definition statement with the following updated statement.

Illustrative example of subject matter classified in this place:



References

Informative references

Replace: The following one row of the existing Informative references table with the following updated row.

Flicker reduction other than flicker reduction circuits used for single beam cathode-ray tubes	G09G2320/0247

G09G3/001

Definition statement

Insert: The following text and images AFTER the existing bullet points in the Definition statement. The bullet points should remain as-is.

Illustrative examples of subject matter classified in this place:

1.

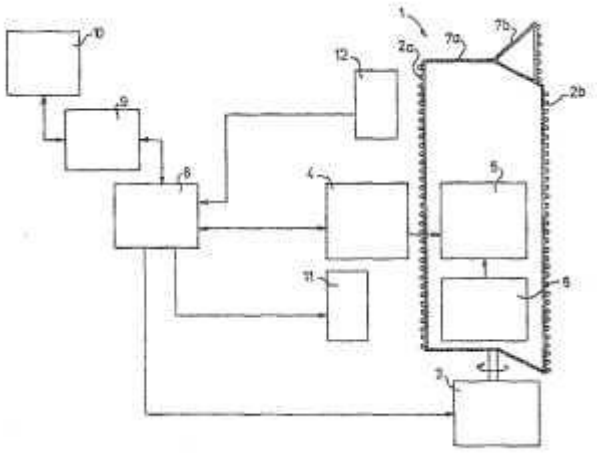


Figure 1 illustrates a display device with rotating display elements.

2.

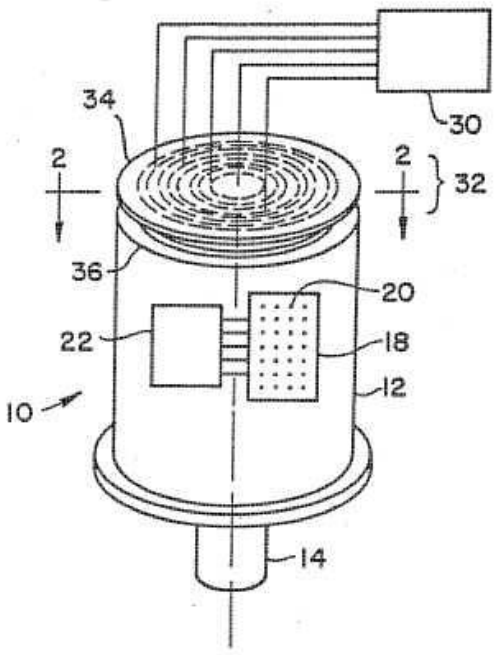


Figure 2 illustrates a high-speed link for rotating display.

3.

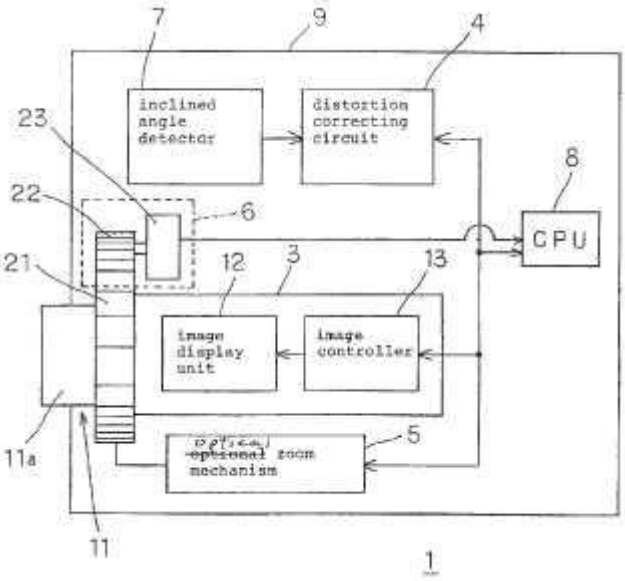


Figure 3 illustrates a projector with image modified to compensate distortions from projecting onto a screen from a side, so called "Keystone correction".

4.

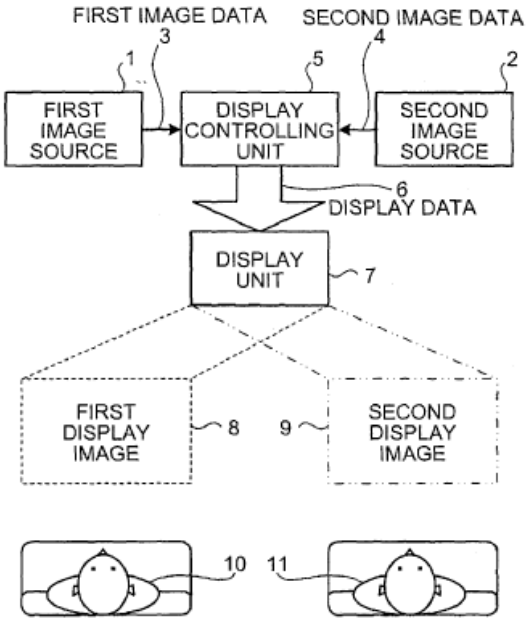
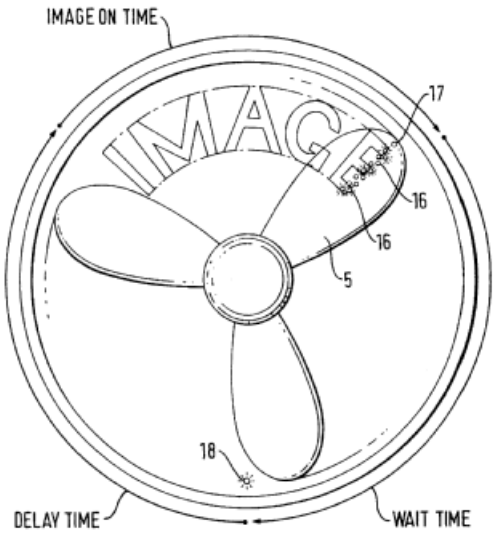
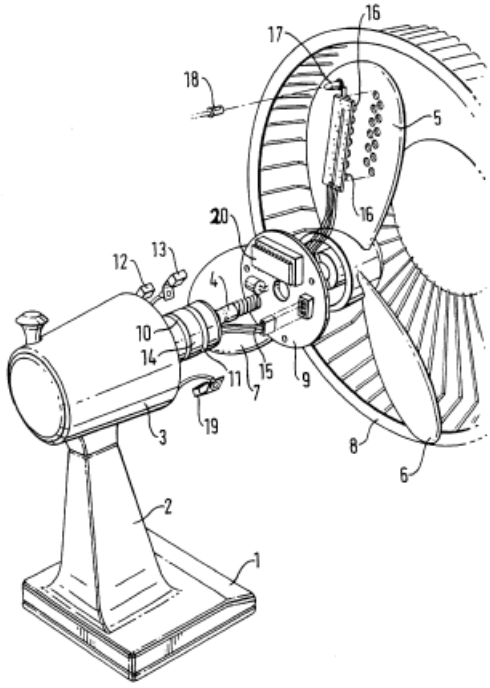


Figure 4 illustrates a coloured display which displays two different images depending on the viewing direction.

5a.



5b.



Figures 5a and 5b illustrate an image display apparatus.

6.

Figure 6 illustrates a baton using light emitting cell array to form a display.

7.

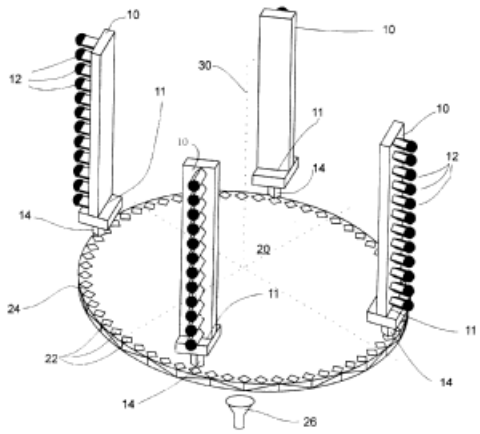


Figure 7 illustrates a rotating drum or blade with linear array of light sources.

References

Limiting references

Replace: The existing Limiting references table with the following updated table.

Slide projectors	G03B23/00

Informative references

Replace: The symbols (right column) in the following three rows in the existing Informative references table with the following updated symbols.

Projection display for cars (e.g. HUDs)	B60K35/23
Stereoscopic and volumetric TV display	G02B30/00
Mobile visual advertising	G09F21/00

Insert: The following new one row into the existing Informative references table.

Stereoscopic video systems	H04N13/00

Delete: The entire Special rules section.

G09G3/291

Delete: The entire Special rules section.

G09G3/292

Delete: The entire Special rules section.

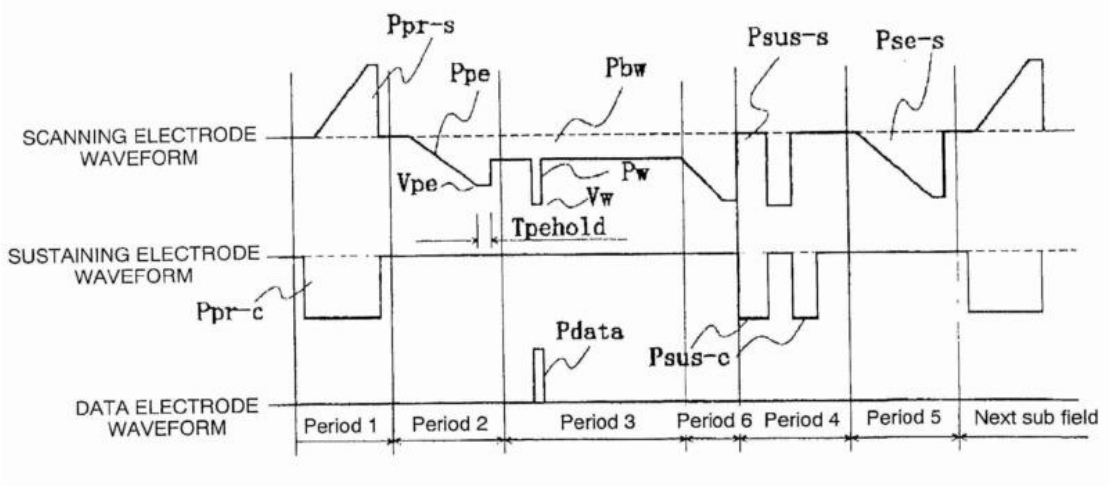
G09G3/2922

Definition statement

Replace: The existing Definition statement with the following updated statement.

Control of displays using luminous gas-discharge cells as display elements arranged in a matrix in an AC panel with details of the control of the gas-discharge cell or the shape of the pulses applied to the electrodes of the gas-discharge cell for generating an erase discharge outside the addressing phase and outside the reset phase at least once per frame.

Illustrative example of subject matter classified in this place:



The Figure illustrates an erasing discharge that is generated to remove charges in those discharge cells, in which no address discharge is generated in the preceding addressing phase in order to avoid an erroneous discharge in the subsequent sustaining phase.

Delete: The entire Limiting references section.

Delete: The entire Special rules section.

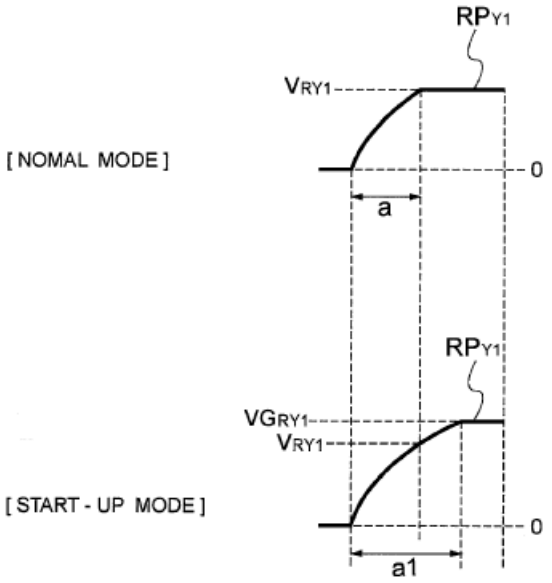
G09G3/2925

Definition statement

Replace: The existing Definition statement with the following updated statement.

Control of displays using luminous gas-discharge cells as display elements arranged in a matrix in an AC panel with details of the control of the gas-discharge cell or the shape of the pulses applied to the electrodes of the gas-discharge cell for generating a priming discharge at the time of powering up the display or at regular intervals.

Illustrative example of subject matter classified in this place:



The Figure illustrates the application of a pulse with larger maximum value during the initialising phase in a start-up mode after the powering on of a plasma display panel than in a normal mode.

Delete: The entire Limiting references section.

Special rules of classification

Replace: The existing Special rules text with the following updated text.

Classification is to be made in this group if a discharge for priming, i.e. for generating charges in the discharge cell, is generated at the time of powering up the display or at regular intervals.

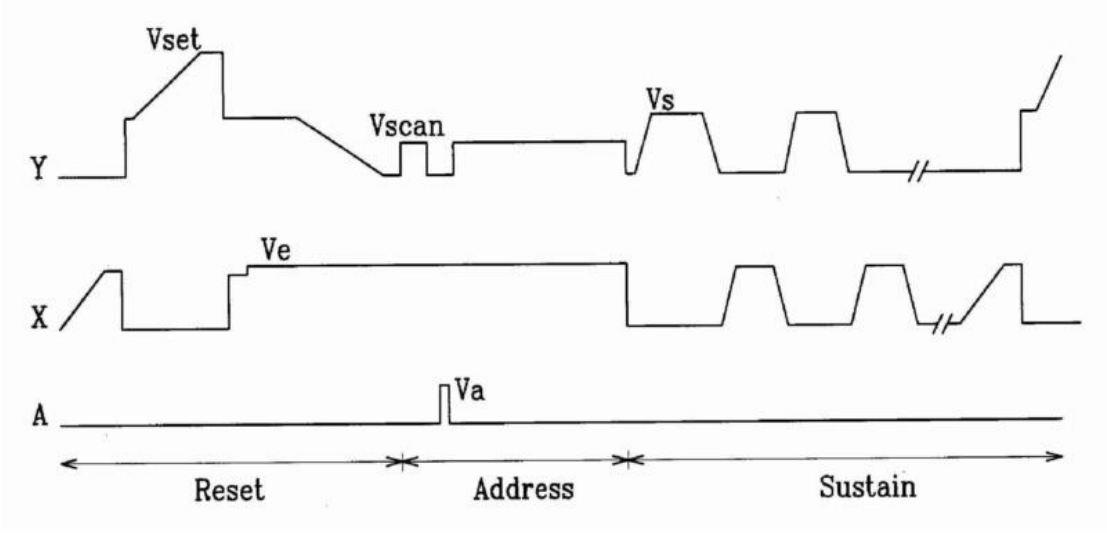
G09G3/2927

Definition statement

Replace: The existing Definition statement with the following updated statement.

Control of displays using luminous gas-discharge cells as display elements arranged in a matrix in an AC panel with details of the control of the gas-discharge cell or the shape of the pulses applied to the electrodes of the gas-discharge cell for generating a reset discharge, i.e. for initialising the gas-discharge cell as a preparation of the subsequent addressing phase.

Illustrative example of subject matter classified in this place:



The Figure illustrates the application of pulses with rising and falling slope to the scan and sustain electrode during a reset phase for generating discharges in order to provide the same wall charge conditions in all the discharge cells as a preparation for the subsequent addressing phase.

Delete: The entire Limiting references section.

Special rules of classification

Replace: The existing Special rules text with the following updated text.

Classification is to be made in this group if a reset discharge, i.e. for initialising the gas-discharge cell as a preparation of the subsequent addressing phase, is generated during every sub-frame, every frame or every multiple frames.

G09G3/296

Delete: The entire Special rules section.

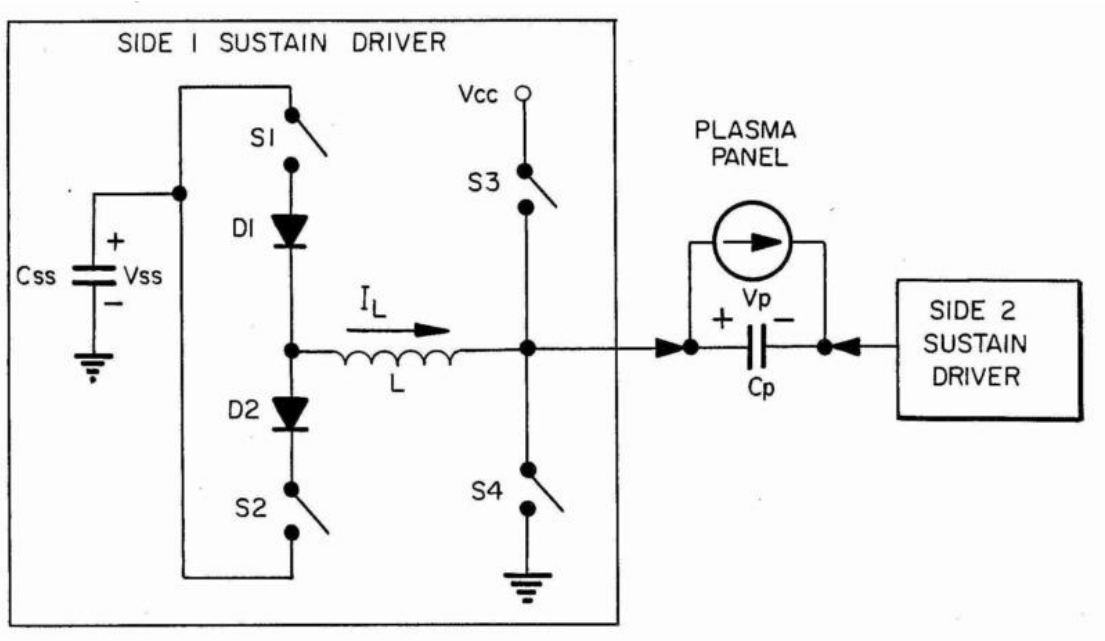
G09G3/2965

Definition statement

Replace: The existing Definition statement with the following updated statement.

Details of a drive circuit for applying pulses to the electrodes of displays using luminous gas-discharge cells as display elements arranged in a matrix in an AC panel, which uses inductors in a circuit for recovering the energy from the electrodes of the display.

Illustrative example of subject matter classified in this place:



The Figure illustrates a sustain electrode drive circuit with energy recovery circuit using an inductor.

Delete: The entire Special rules section.

G09G3/3406

Definition statement

Replace: The existing Definition statement with the following updated statement.

- Control of the independent light source illumination the matrix display (front and backlight).
- Standard field sequential colour displays without specific details.
- One or more separately controlled illumination sources, without correspondence to different display areas.

Illustrative examples of subject matter classified in this place:

1.

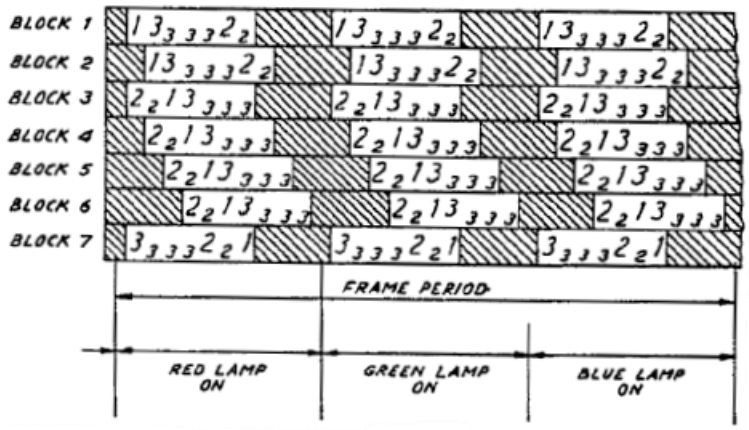
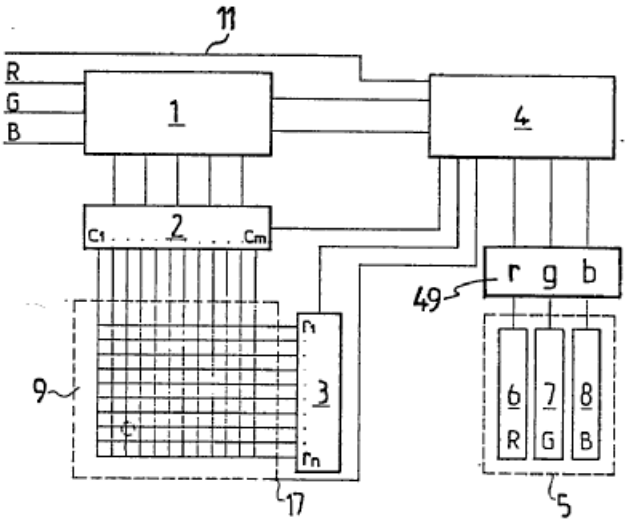


Figure 1 illustrates a standard field sequential display without specific details.

2.



3.

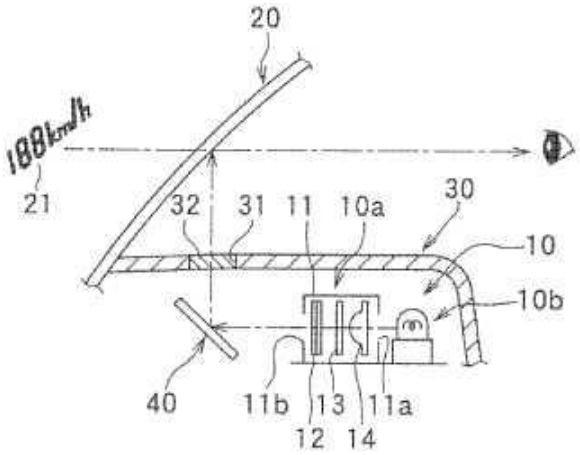


Figure 3 illustrates two illumination sources without corresponding display areas.

References

Limiting references

Replace: The existing Limiting references table with the following updated table.

Illumination devices structurally associated with liquid crystal cells	G02F1/1336

Informative references

Delete: The following row from the existing Informative references table.

Constructional details of illuminating devices.	G02F1/13357

Insert: The following new row into the existing Informative references table.

Circuit arrangements for operating light sources in general, i.e. where the type of light source is not relevant	H05B 47/00

Special rules of classification

Replace: The existing Special rules text with the following updated text.

Classification as additional information is obligatory in the following indexing codes: G09G2310/0235, G09G2310/024, G09G2320/06, G09G2320/0613, G09G2320/062, G09G2320/0626, G09G2320/0633, G09G2320/064, G09G2320/0646, G09G2360/14, G09G2360/144, G09G2360/145 or G09G2360/16.

G09G3/3614

References

Informative references

Replace: The symbol in the existing Informative references table with the following updated symbol.

Control of polarity inversion for display devices other than LCD devices	G09G2310/0254

G09G5/001

Definition statement

Replace: The existing Definition statement with the following updated statement.

Resolving memory contention by CRT controller and the CPU, eventually combined with refresh of the dynamic memory.

Illustrative examples of subject matter classified in this place:

1.

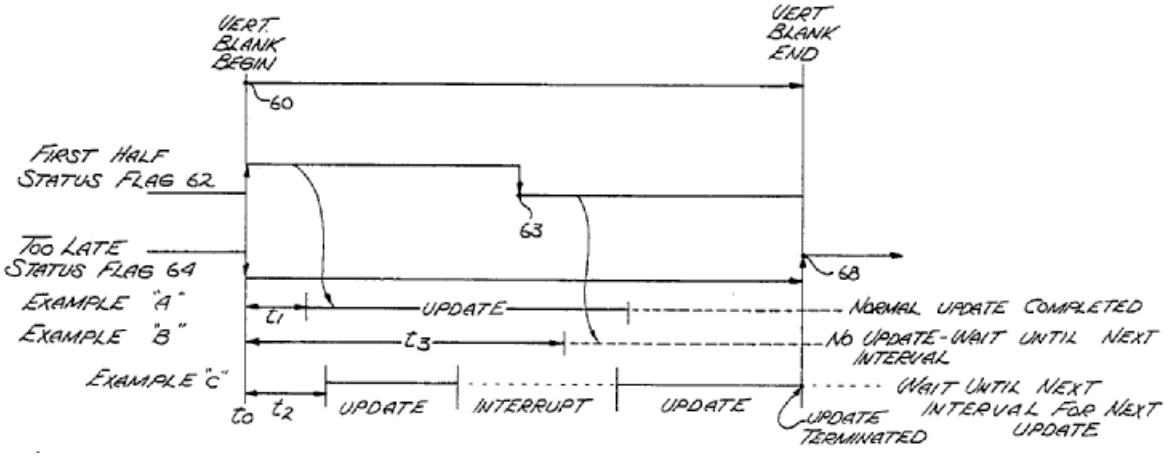


Figure 1 illustrates a bit-map based display system.

2.

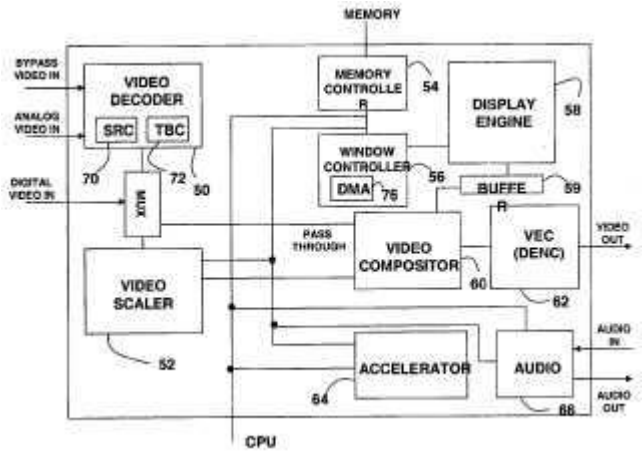


Figure 2 illustrates a display system with video synchronization.

3.

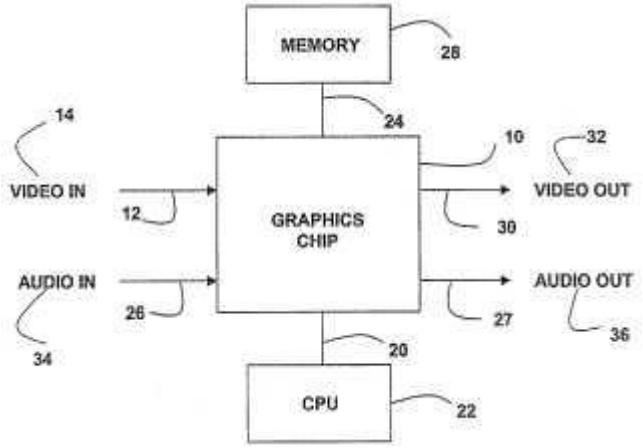


Figure 3 illustrates a display system with blending graphics and video surfaces.

4.

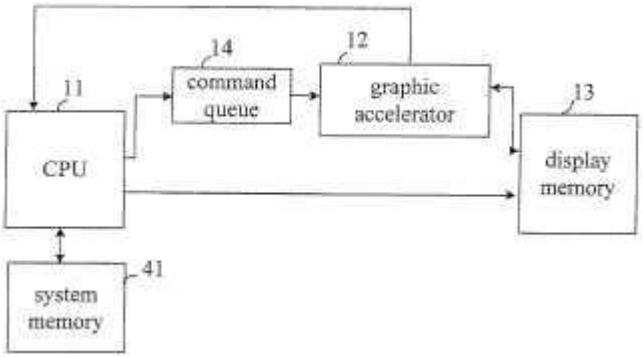


Figure 4 illustrates a method for bitmapping and synchronization.

5.

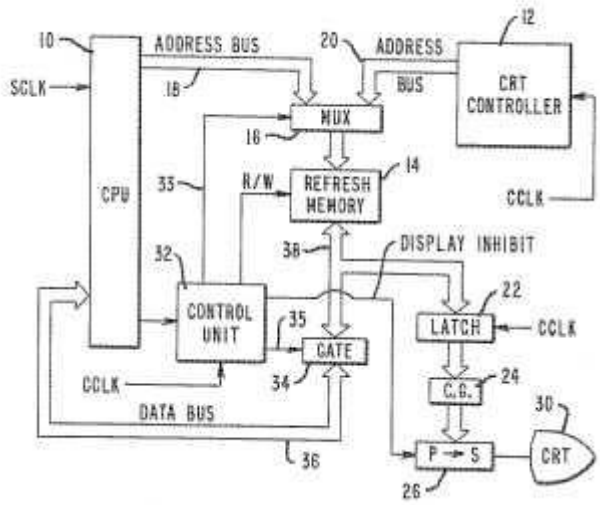


Figure 5 illustrates a character-based display system.

6.

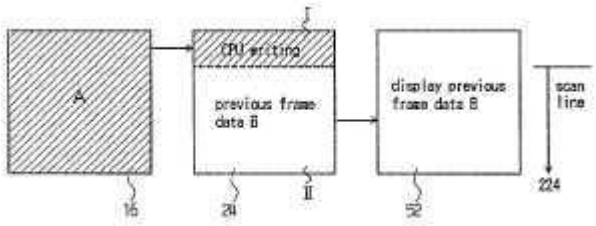
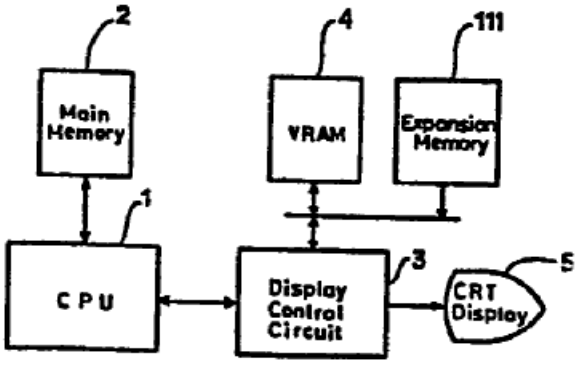
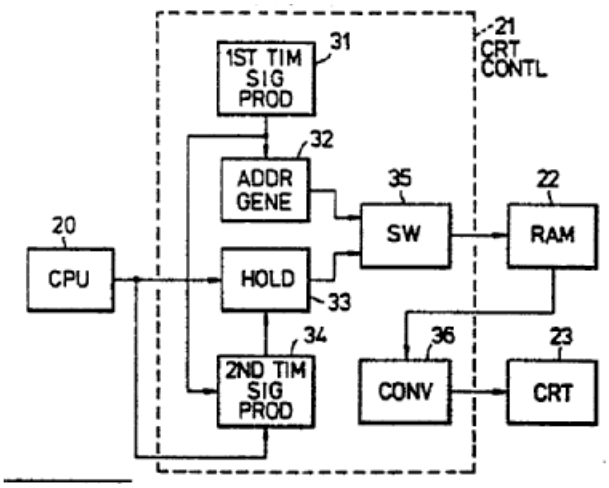


Figure 6 illustrates a display control unit that is both bit-map and character-based.

7a.



7b.



Figures 7a and 7b illustrate a generic display control unit.

Insert: The following new Informative references section.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Control of the character-code memory	G09G5/222
Control of the bit-mapped memory	G09G5/39
Addressing or allocation within memory systems or architectures	G06F12/02

Delete: The entire Special rules section.