#### EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

#### CPC NOTICE OF CHANGES 340

#### DATE: JANUARY 1, 2017

#### PROJECT MP0335

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

Action*	<u>Subclass</u>	<u>Group(s)</u>
Modified Definitions	G09G	3/32
(no frozen (F)symbol definitions should	0090	5/52
deleted):		
	G09G	3/3208
	G09G	3/3216
	G09G	3/3225
	G09G	3/3233
	G09G	3/3241
	G09G	3/325
	G09G	3/3258
	G09G	3/3266
	G09G	3/3275
	G09G	3/3283
	G09G	3/3291

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

#### This Notice of Changes includes the following [Check the ones included]:

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

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# 2. A. DEFINITIONS

# G09G3/32 (modified)

Delete the current Definition statement.

Insert the following new Definition statement:

### **Definition statement**

Control of displays using electroluminescent display elements, which are semiconductor devices, e.g. diodes or transistors, arranged in a matrix without details of the semiconductive material.Control of displays using electroluminescent display elements, which are semiconductor devices, e.g. diodes or transistors, arranged in a matrix, wherein the semiconductive material is inorganic.

### Delete the current References section.

Insert the following new section.

### References

### **Informative references**

Control of displays using electroluminescent display elements, which are semiconductor devices, e.g. diodes or transistors, for	G09G3/14
displaying a character composed by a fixed number of display	
elements as segments or dots	

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# G09G3/3208 (modified)

### Delete the current **Definition statement**.

Insert the following new section.

## **Definition statement**

Control of displays using organic electroluminescent display elements, which are semiconductor devices, e.g. diodes or transistors, arranged in a matrix, wherein the semiconductive material is organic

### Delete the current References section.

Insert the new section.

### References

### **Informative references**

Control of displays using electroluminescent display elements, which are semiconductor devices, e.g. diodes or transistors, for displaying a character composed by a fixed number of display elements as segments or dots	G09G3/14
Details of the drive circuits for applying the scan signals to the	G09G3/3266
scan electrodes of an organic electroluminescent matrix display	
Details of the drive circuits for applying the data signals to the	G09G3/3275
data electrodes of an organic electroluminescent matrix display	

## **G09G3/3216 (modified)**

### Delete the current **Definition statement**.

Insert the new Definition statement.

### **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix, wherein each display element is located at the intersection of a scan and a data electrode, and directly controlled by the scan and data signal supplied to the scan and

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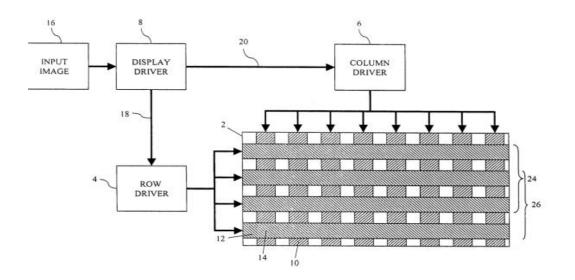
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data electrode, respectively, i.e. without an active element such as a diode (other than the light-emitting one), or a transistor at the intersection being involved.

### <u>Insert</u> the following **text**:

The figure below is an example of a passive matrix. In the figure, passive matrix is characterized as having a line driving method which lights all light-emitting devices of the line at once, and a matrix is a 2-dimensional arrangement, comprising cathode and anode strips.

### Insert the following figure:



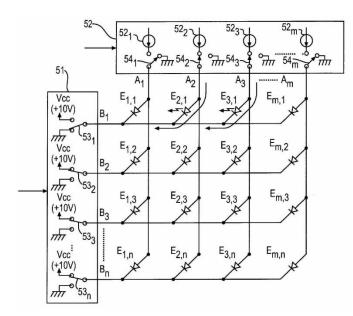
## Insert the following text:

The figure below is an example of selective application of a current to the anodes of OLED display elements as data signal via data electrodes  $A_k$  while a voltage is supplied to the cathodes of the display elements as scan signal via scan electrodes.

Insert the following figure from the existing Limiting references section:

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### References

Delete the existing Limiting references.

### Insert the following Informative Reference.

### **Informative Reference**

Details of the drive circuits for applying the scan signals to the scan electrodes of an organic electroluminescent matrix display	G09G3/3266
Details of the drive circuits for applying the data	G09G3/3275
signals to the data electrodes of an organic	
electroluminescent matrix display	

Delete the existing text "Examples....via scan electrodes)."

Delete the figure and replace under Definition statement.

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# G09G3/3225 (modified)

Delete the current Definition statement.

Insert the following new Definition statement.

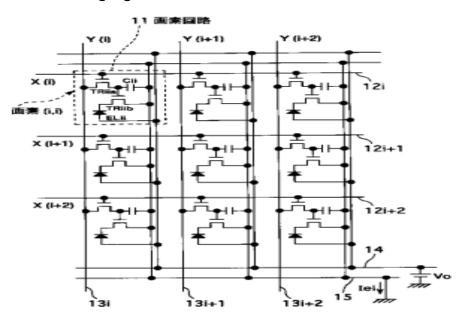
## **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix, wherein each display element is located together with an active element such as a transistor or a diode, other than the light-emitting one, at the intersection of a scan electrode and a data electrode. The active element has to be enabled by the application of a scan signal to the scan electrode so that the display element receives the data signal.

Insert the following text:

The figure below is an example of an active-matrix. In the figure, active-matrix is an individual driving method where light-emitting devices are turned on by each film transistor (TFT), and a matrix is an arrangement of light-emitting devices or TFTs or their combinations.

## Insert the following figure:



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### References

## Delete the existing Limiting references.

# Insert the following Informative References.

### **Informative References**

Details of the drive circuits for applying the scan signals to the	G09G3/3266
scan electrodes of an organic electroluminescent matrix display	
Details of the drive circuits for applying the data signals to the	G09G3/3275
data electrodes of an organic electroluminescent matrix display	

<u>Delete</u> the existing **Special rules of classification**.

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# G09G3/3233 (modified)

### Delete the current Definition statement.

Insert the following new Definition statement.

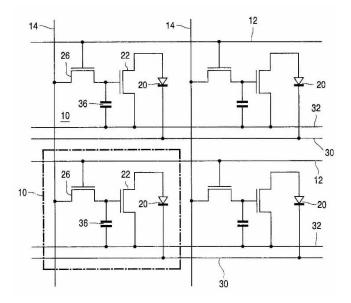
## **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix together with active elements, wherein each active element enables a driving current flowing through a display element corresponding to a data signal supplied to a data electrode. The corresponding active element must concurrently be selected by a scan signal supplied to its scan electrode.

### Insert the following text:

The figure below is an example of data voltage signal supplied to the data line (14), which controls the driving current flowing through the organic electroluminescent display element.

Insert the following figure from the existing Limiting references section:



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### References

## <u>Delete</u> the existing Limiting references.

### Insert the following Informative References.

## **Informative References**

Details of the drive circuits for applying the scan signals to the	G09G3/3266
scan electrodes of an organic electroluminescent matrix display	
Details of the drive circuits for applying the data signals to the	G09G3/3275
data electrodes of an organic electroluminescent matrix display	

<u>Delete</u> the existing text "Examples....display element)."

Delete the figure and replace under Definition statement.

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# G09G3/3241 (modified)

Delete the current Definition statement.

Insert the following new Definition statement.

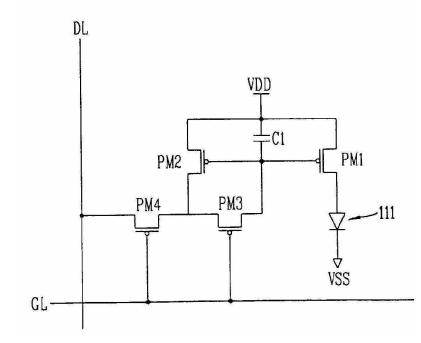
## **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix together with active elements, wherein each active element enables a driving current flowing through a display element corresponding to a data current supplied to a data electrode, which is supplied when the active element is activated by a scan signal supplied to a scan electrode, e.g. by a current mirror having the data current flowing through the data electrode as an input current, and the driving current flowing through the display element as an output current.

Delete the existing text "Illustrative examples...display element)"

Insert the following text:

The figure below is an example of data current signal supplied to the data line DL and flowing through the input part PM2 of a current mirror circuit, which controls the driving current flowing through the output part PM1 of the current mirror circuit and the organic electroluminescent display element.



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# G09G3/325 (modified)

Delete the current Definition statement.

Insert the following new Definition statement.

## **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix together with active elements, wherein each active element enables a driving current flowing through a display element corresponding to a data current flowing through a data electrode and through a driving transistor, but not through the display element connected in series with the driving transistor, during a first period when the active element is activated by a scan signal supplied to a scan electrode, and with the driving current flowing through the driving transistor and the display element during a second period when the scan signal is not supplied to the scan electrode, e.g. by a first switch connecting the driving transistor to the data electrode during the first period, and a second switch connecting the driving transistor to the display element during the second period.

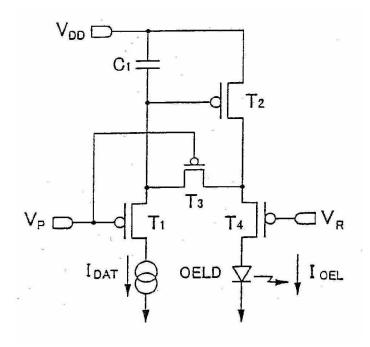
Delete the existing text "Illustrative examples...scan period)"

### Insert the following text:

The figure below is an example where the data current signal ldat is applied to the data line and flows only through the driving transistor T2 during the scan period (T1 and T3 ON, T4 OFF), and through the driving transistor and the organic electroluminescent display element after the scan period (T1 and T3 OFF, T4 ON).

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# G09G3/3258 (modified)

### Delete the current Definition statement.

Insert the following new Definition statement.

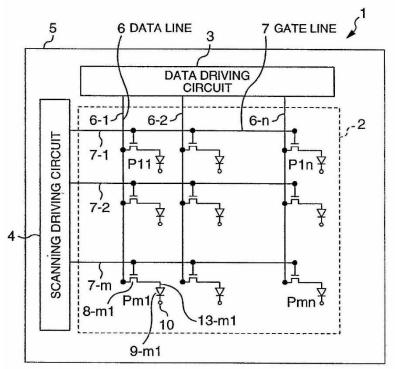
## **Definition statement**

Control of displays using organic electroluminescent display elements arranged in a matrix together with active elements, wherein each active element enables the application of a voltage across a display element corresponding to a data signal supplied to a data electrode. The corresponding active element must concurrently be selected by a scan signal supplied to a scan electrode.

Delete the existing text "Illustrative examples...display element)"

### Insert the following text:

The figure below is an example where the application of a scan signal on a line, 7-j ( $1 \le j \le m$ ), enables the transistors of pixels belonging to that line. The light-emitting diodes of the line can then receive data by supplying a data signal on column 6-k ( $1 \le k \le m$ ).



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# G09G3/3266 (modified)

Delete the current **Definition statement**.

Insert the following new Definition statement.

## **Definition statement**

Details of a drive circuit for supplying scan signals to scan electrodes of an organic electroluminescent matrix display.

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# G09G3/3275 (modified)

Delete the current **Definition statement**.

Insert the following new Definition statement.

## **Definition statement**

Details of a drive circuit for supplying data signals to data electrodes of an organic electroluminescent matrix display.

<u>Delete</u> the existing **Special rules of classification**.

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# G09G3/3283 (modified)

## Delete the current Definition statement.

Insert the following new Definition statement.

## **Definition statement**

Details of a drive circuit for supplying data signals to data electrodes of an organic electroluminescent matrix display, the data signals being in the form of a variable data current value according to the data to be displayed.

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# G09G3/3291 (modified)

# Delete the current **Definition statement**.

Insert the following new Definition statement.

## **Definition statement**

Details of a drive circuit for supplying data signals to data electrodes of an organic electroluminescent matrix display, the data signals being in the form of variable data voltage value according to the data to be displayed.