

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1060

DATE: MAY 1, 2021

PROJECT MP0473

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>SCHEME:</b>		
Titles Changed:	H03K	3/53
	H03K	4/14, 4/16, 4/52, 4/54
	H03K	5/13, 5/153,
	H03K	6/02
	H03K	17/30, 17/64, 17/945
	H03K	19/082, 19/12, 19/14
	H03K	21/00
	H03K	23/80
<b>DEFINITIONS:</b>		
Definitions New:	H03K	3/53
	H03K	4/14, 4/16, 4/52, 4/54, 4/90
	H03K	5/02, 5/125
	H03K	6/02, 6/04
	H03K	17/64
	H03K	19/082, 19/12
	H03K	23/80
Definitions Modified:	H03K	5/153
	H03K	17/30, 17/945
	H03K	21/00

**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(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)

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3.  REVISION CONCORDANCE LIST (RCL)
4.  CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5.  CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

**SUBCLASS H03K – PULSE TECHNIQUE (measuring pulse characteristics G01R; modulating sinusoidal oscillations with pulses H03C; transmission of digital information H04L; discriminator circuits detecting phase difference between two signals by counting or integrating cycles of oscillation H03D 3/04; automatic control, starting, synchronisation or stabilisation of generators of electronic oscillations or pulses where the type of generator is irrelevant or unspecified H03L; coding, decoding or code conversion, in general H03M)**

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
M	H03K 3/53	2	by the use of an energy-accumulating element discharged through the load by a switching device controlled by an external signal and not incorporating positive feedback (H03K 3/335 takes precedence)	
M	H03K 4/14	5	using two tubes so coupled that the input of each one is derived from the output of the other, e.g. multivibrator	
M	H03K 4/16	5	using a single tube with positive feedback through transformer, e.g. blocking oscillator	
M	H03K 4/52	5	using two semiconductor devices so coupled that the input of each one is derived from the output of the other, e.g. multivibrator	
M	H03K 4/54	5	using a single semiconductor device with positive feedback through a transformer, e.g. blocking oscillator	
M	H03K 5/13	1	Arrangements having a single output and transforming input signals into pulses delivered at desired time intervals	
M	H03K 5/153	1	Arrangements in which a pulse is delivered at the instant when a predetermined characteristic of an input signal is present or at a fixed time interval after this instant (switching at zero crossing H03K 17/13)	
M	H03K 6/02	1	Amplifying pulses	
M	H03K 17/30	1	Modifications for providing a predetermined threshold before switching (shaping pulses by thresholding H03K 5/08)	
M	H03K 17/64	4	having inductive loads	
M	H03K 17/945	2	Proximity switches (H03K 17/96 takes precedence)	
M	H03K 19/082	3	using bipolar transistors	
M	H03K 19/12	2	using diode rectifiers	

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<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
M	H03K 19/14	2	using opto-electronic devices, i.e. light-emitting and photoelectric devices electrically- or optically-coupled (optical logic elements G02F 3/00)	
M	H03K 21/00	0	Details of pulse counters or frequency dividers	
M	H03K 23/80	1	using semiconductor devices having only two electrodes, e.g. tunnel diode, multi-layer diode	

\*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T= existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:

- \*\*No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required “anchor” symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups). Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types.
- “Transferred to” column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the “Transferred to” column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: “< administrative transfer to XX>”, “<administrative transfer to XX and YY simultaneously>”, or “<administrative transfer to XX, YY ...and ZZ simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be “additional information”.
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations “ADD” or “INV”: <administrative transfer to XX ADD> , <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the “D” entries of 2000-series or Y-series groups may not require a destination (“Transferred to”) symbol, however it is required to specify “<no transfer>” in the “Transferred to” column for such cases.
- For finalisation projects, the deleted “F” symbols should have <no transfer> in the “Transferred to” column.
- For more details about the types of scheme change, see CPC Guide.

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## 2. A. DEFINITIONS (new)

Insert the following new definitions.

### H03K 3/53

#### References

#### Informative references

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

Working of metal by electro-erosion with spark discharge	B23H
For internal combustion engine ignition systems	F02P 3/08
Electronic lighters	F23Q 2/285, F23Q 3/00
Flash lamps	H05B 41/30

### H03K 4/14

#### References

#### Informative references

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

Circuits for generating electric pulses	H03K 3/00
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### H03K 4/16

#### References

#### Informative references

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

Circuits for generating electric pulses	H03K 3/00
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**H03K 4/52****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Circuits for generating electric pulses	<a href="#">H03K 3/00</a>
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**H03K 4/54****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Circuits for generating electric pulses	<a href="#">H03K 3/00</a>
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**H03K 4/90****References****Limiting references***This place does not cover:*

Modifying slopes of pulses	<a href="#">H03K 6/04</a>
Scanning distortion correction for television receivers	<a href="#">H04N 3/23</a>

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

Synchronising arrangements in time division multiplex systems using pulse stuffing for systems with different or fluctuating information rates	<a href="#">H04J 3/07</a>
Arrangements for synchronizing receiver with transmitter	<a href="#">H04L 7/00</a>
Circuits for synchronizing transmitter and receiver in the transmission or reproduction of documents	<a href="#">H04N 1/36</a>
Synchronisation in television systems	<a href="#">H04N 5/00</a>
Colour synchronisation in television systems	<a href="#">H04N 9/44</a>
Synchronisation arrangements in wireless communication networks	<a href="#">H04W 56/00</a>

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**Synonyms and Keywords**

*In patent documents, the word/expression in the first column is often used instead of the word/expression in the second column, which is used in the classification scheme of this place:*

colour synchronisation	sub carrier lock
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**H03K 5/02****References****Limiting references**

*This place does not cover:*

By increasing duration; by decreasing duration	<a href="#">H03K 5/04</a>
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**Informative references**

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

Amplifiers in general	<a href="#">H03F</a>
High frequency amplifiers	<a href="#">H03F 3/189</a>
Arrangements for measuring phase angle between a voltage and a current or between voltage or currents	<a href="#">G01R 25/00</a>

**H03K 5/125****References****Limiting references**

*This place does not cover:*

Measuring characteristics of individual pulses	<a href="#">G01R 29/02</a>
Separation of synchronising signals in television systems	<a href="#">H04N 5/08</a>

**Informative references**

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

Arrangements for measuring currents or voltages or for indicating presence or sign thereof	<a href="#">G01R 19/00</a>
Arrangements for measuring frequencies; arrangements for analysing frequency spectra	<a href="#">G01R 23/00</a>

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Arrangements for measuring phase angle between a voltage and a current or between voltage or currents	<a href="#">G01R 25/00</a>
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**H03K 6/02****References****Informative references**

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

Generation of a sawtooth current through an inductor by amplification	H03K 4/28, H03K 4/39, H03K 4/43, H03K 4/62, H03K 4/69
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**H03K 6/04****References****Limiting references**

*This place does not cover:*

S-correction in television	<a href="#">H04N 3/23</a>
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**Informative references**

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

Arrangements for measuring currents or voltages or for indicating presence or sign thereof	<a href="#">G01R 19/00</a>
Arrangements for measuring frequencies; arrangements for analysing frequency spectra	<a href="#">G01R 23/00</a>
Arrangements for measuring phase angle between a voltage and a current or between voltage or currents	<a href="#">G01R 25/00</a>

**H03K 17/64****References****Informative references**

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



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Driving circuits for electromagnets making use of a switching regulator	<a href="#">H01H 47/325</a>
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### **H03K 19/082**

#### **References**

#### **Informative references**

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

In combination with field-effect transistor	<a href="#">H03K 19/094</a>
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### **H03K 19/12**

#### **References**

#### **Informative references**

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

Diode-transistor logic	<a href="#">H03K 19/084</a>
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### **H03K 23/80**

#### **References**

#### **Informative references**

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

Unijunction transistors	<a href="#">H03K 23/84</a>
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2. B. DEFINITIONS QUICK FIX

<u>Symbol</u>	<u>Location of change</u> (e.g., section title)	<u>Existing reference symbol or text</u>	<u>Action; New symbol; New text</u>
H03K 5/153	Limiting references		<p><u>Insert</u> the following <u>new</u> “Limiting references” section.</p> <p><b>Limiting references</b></p> <p><i>This place does not cover:</i></p> <p>Switching at zero crossing H03K 17/13</p>
H03K 17/30	Limiting references		<p><u>Insert</u> the following <u>new</u> “Limiting references” section.</p> <p><b>Limiting references</b></p> <p><i>This place does not cover:</i></p> <p>Shaping pulses by thresholding H03K 5/08</p>
H03K 17/30	Informative references		<p><u>Insert</u> the following <u>new</u> “Informative references” section.</p> <p><b>Informative references</b></p> <p><i>Attention is drawn to the following places, which may be of interest for search:</i></p> <p>For logic circuits      H03K 19/0021</p>
H03K 17/945	Limiting references		<p><u>Insert</u> the following <u>new</u> “Limiting references” section.</p> <p><b>Limiting references</b></p> <p><i>This place does not cover:</i></p> <p>Touch switches      H03K 17/96</p>

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<u>Symbol</u>	<u>Location of change</u> (e.g., section title)	<u>Existing reference symbol or text</u>	<u>Action; New symbol; New text</u>
H03K 17/945	Informative references		<p><u>Insert</u> the following <u>new</u> rows in the existing “Informative references” table.</p> <p>Proximity fuzes      F42C 13/00</p> <p>Detecting masses or objects, e.g. using a magnetic or optical detector G01V 3/00, G01V</p>
H03K 21/00	Limiting references		<p><u>Delete</u> the entire Limiting references section.</p>
H03K 21/00	Informative references		<p><u>Insert</u> the following <u>new</u> “Informative references” section.</p> <p><b><i>Informative references</i></b></p> <p><i>Attention is drawn to the following places, which may be of interest for search:</i></p> <p>Changing Frequency      H03K 5/00006</p> <p>High Security Counting      G01C 22/02</p> <p>Measuring Pulse Width Time G01R 29/00</p> <p>Non-integer Counting and Performing Operations by counting      G06F 7/60</p> <p>Number-of-one (population) Counter G06F 7/607</p> <p>Binary Multiplication and Pulse rate divider      G06F 7/62 – G06F 7/68</p> <p>PLLs including Dividers      H03B, H03L</p>

NOTES:

- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.