

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 979

DATE: JANUARY 1, 2021

PROJECT DP0224

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>New Definitions:</b>	G06F	30/00, 30/10, 30/12, 30/13, 30/15 30/17, 30/23, 30/27, 30/30, 30/36 30/39, 30/392
	G06F	2115/08

**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)
2. 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)

## 2. A. DEFINITIONS (new)

### G06F 30/00

#### Definition statement

*This place covers:*

- Arrangements and methods specially adapted for automated execution for design of technical entities
- Simulation for design purposes of technical entities

#### References

##### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Patterns for cutting-out; Methods of drafting or marking-out such patterns	<a href="#">A41H 3/00</a>
Software design	<a href="#">G06F 8/20</a>
Software simulation	<a href="#">G06F 9/455</a>
Adaptive control systems involving the use of models or simulators	<a href="#">G05B 13/04</a>
Three dimensional graphical modelling and manipulation	<a href="#">G06T 17/00</a> , <a href="#">G06T 19/00</a>
Arrangements for designing of test circuits for static stores	<a href="#">G11C 29/54</a>
Simulation for teaching or training purposes	<a href="#">G09B 9/00</a>

#### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Design	Description of technical parameters or a virtual model of a technical arrangement; does not cover aesthetic aspects; not to be confused with the physical object
Verification	Determining the correct functioning of a design; not to be confused with testing of a physical object

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Simulation	Determining technical properties and behaviour of an entity by performing a virtual simulation of a model in a computer, possibly by using specifically adapted hardware.
Model	A computer readable description of an entity, defining or implying technical properties.

## G06F 30/10

### Definition statement

*This place covers:*

- Design of geometrical structures of technical entities, e. g. shape, dimensions, etc., using CAD
- Simulation for the design thereof

### References

#### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Generation of images and models in computer graphics	<a href="#">G06T 11/00</a> , <a href="#">G06T 15/00</a> , <a href="#">G06T 17/00</a> , <a href="#">G06T 19/00</a>
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#### Informative references

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

Layout of circuits; design at the physical level	<a href="#">G06F 30/347</a> , <a href="#">G06F 30/39</a>
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## G06F 30/12

### Definition statement

*This place covers:*

- Software-implemented user interfaces specially adapted for geometric CAD
- Hardware input/output means such as virtual reality, specially adapted for geometric CAD

### References

#### Informative references

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

Input arrangements or combined input and output arrangements for interaction between user and computer	<a href="#">G06F 3/01</a>
Interaction techniques based on graphical user interfaces [GUI]	<a href="#">G06F 3/048</a>

## G06F 30/13

### References

#### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Design or layout of roads	<a href="#">E01C 1/00</a>
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## G06F 30/15

### Definition statement

*This place covers:*

- Structural design of vehicles or components or systems thereof using CAD
- Simulation for the design thereof

Note: The term “vehicles” is to be understood broadly and covers land, air, space, naval or other types of vehicles.

### References

#### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Simulators for teaching control of vehicles or other craft	G09B 9/02
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## G06F 30/17

### Definition statement

*This place covers:*

CAD for the design of:

- entities comprising moving parts
- entities comprising alternative configurations
- engineering tolerances, e.g. mechanical component tolerance

Simulation for the design thereof

## G06F 30/23

### References

#### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Picture mesh generation	<a href="#">G06T 17/20</a>
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## G06F 30/27

### Definition statement

*This place covers:*

Using machine learning for the purpose of CAD

### References

#### Informative references

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

Machine learning per se	<a href="#">G06N 20/00</a>
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## G06F 30/30

### Definition statement

*This place covers:*

- Using CAD for the design of circuits
- Simulation of the design thereof
- CAD relating to superconducting circuits or circuits such as rapid single flux quantum (RSFQ) circuits or other circuits using Josephson junctions

Note: The term “circuit” is to be understood broadly and covers electric, electronic, and integrated circuits as well as circuits on a printed circuit board [PCB].

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## References

### Informative references

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

Functional testing	<a href="#">G06F 11/26</a>
Testing of electronic circuits	<a href="#">G01R 31/28</a>

## G06F 30/36

### Definition statement

*This place covers:*

CAD tools working at the analogue level.

Note:

The nature of the designed circuit (e.g. a digital circuit) is not decisive: if the CAD tool operates over continuous values (e.g. current, voltage, frequency), the subject-matter is to be classified here.

## G06F 30/39

### Definition statement

*This place covers:*

CAD tools operating over the physical parameters (geometry, routing, and sizing) of the circuit, considering the electrical characteristics of said circuit.

## References

### Limiting references

*This place does not cover:*

Physical level design for reconfigurable circuits	<a href="#">G06F 30/347</a>
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### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Optical proximity correction [OPC] design processes	<a href="#">G03F 1/36</a>
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## **G06F 30/392**

### **Definition statement**

*This place covers:*

CAD tools for use during the floorplanning design stage of a circuit.

Note: The term “floorplan” is used here in the context of circuit design with its generally accepted meaning and covers an early stage in the hierarchical approach to integrated circuit design regarding optimally placing a given set of circuit modules.

Floorplanning covers taking in some of the geometrical constraints in a design such as

- bonding pads for off-chip connections
- line drivers which often have to be located as close to bonding pads as possible
- minimum chip area needed to fit in the required number of pads; predetermined area blocks such as intellectual property blocks (IP-blocks)
- limitations such as permitting no routing of signals directly above an IP block

Floorplan optimisation subject to various constraints and requirements of optimisation, e.g. block areas, aspect ratios, estimated total measure of interconnects, etc.

### **Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

IP block, IP core	The terms IP block and IP core are used as synonyms and relate to reusable unit of logic, cell, or integrated circuit (commonly called a "chip") layout design that is the intellectual property of one party. The term is derived from the licensing of the patent and/or source code copyright that exist in the design. IP cores can be used as building blocks within application-specific integrated circuit (ASIC) designs or field-
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	programmable gate array (FPGA) logic designs during the floorplanning design stage of a circuit.
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## **G06F 2115/08**

### **Definition statement**

*This place covers:*

CAD tools specifically adapted for using IP blocks or IP cores.

### **Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

IP block, IP core	The terms IP block and IP core are used as synonyms and relate to reusable unit of logic, cell, or integrated circuit (commonly called a "chip") layout design that is the intellectual property of one party. The term is derived from the licensing of the patent and/or source code copyright that exist in the design. IP cores can be used as building blocks within application-specific integrated circuit (ASIC) designs or field-programmable gate array (FPGA) logic designs during the floorplanning design stage of a circuit.
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