



Information on the preparation of the abstract of the patent application stipulated in section 36 of the Patent Act (*Patentgesetz*)

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The abstract shall be only for providing technical information, i.e. it is intended to provide a quick overview of the content of the invention and be usable in machine documentation systems. It is not part of the application and can therefore not be used for determining the scope of protection or not be taken into account as original disclosure of the invention within the meaning of section 34 (4) of the Patent Act. The abstract shall not be relevant for the content of the invention. In order to fulfil its purpose, the abstract shall be readily comprehensible, concise and clear and shall present the essential content of the mechanical, chemical or physical subject matter described in the application. It is therefore expedient to represent the parts of the abstract prescribed by section 36 of the Patent Act in an arrangement that is always strictly adhered to. This should be done according to the following system, using the numbers given. The abstract should not consist of more than 1,500 characters.

Structure of the abstract pursuant to section 36 of the Patent Act

1. Title

The title must be given in accordance with the title of the invention that means if possible, indicating the patent categories claimed, such as "apparatus. . .", "process. . .", "apparatus and process. . ." or "means. . .".

2. Short version

2.1. Technical problem of the invention = technical task and result to be achieved

The problem must be specified as concretely as possible with regard to the advantages achieved over the state of the art.

2.2. Solving the problem or technical task

The essential characteristics of the solution, for example, concrete features of devices, process steps, substance components, etc. must be specified here. If necessary, several solutions must be indicated. If a drawing with reference signs is attached, these or the most important ones should be included in the abstract. The reference signs in the abstract should be enclosed in parentheses.

2.3. Field of application

As a rule, the special field of application must be specified according to the embodiment example described in the application.

3. Drawing

The abstract may be accompanied by a drawing that illustrates the content of the abstract and clearly presents the invention.

The drawing attached to the abstract is not part of the application.

It is often useful to enclose with the abstract that drawing from the application which best describes the invention.

It is imperative that a drawing be attached to the abstract if reference is made to a drawing in the text of the abstract.

The examination unit shall select the drawing for the abstract if the applicant has not made a selection despite being invited to do so or if several drawings are mentioned in the abstract and it is not clear which drawing most distinctly characterises the invention in the applicant's opinion.

Example 1

1. Process for the production of methanol.

2.1. Methanol has so far been produced on an industrial scale by catalytic hydrogenation of carbon monoxide in the presence of a ZnO-Cr₂O₃ mixed catalyst at temperatures of approx. 400°C and pressures of approx. 30 MPa. To control the high temperatures and pressures extensive equipment outlays are required. The new process is meant to work at low temperatures and pressures.

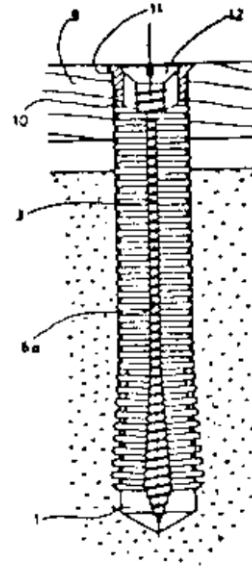
2.2. A C_n-ZnO-Cr₂O₃ catalyst is used in the production of methanol by catalytic hydrogenation of carbon monoxide; the synthesis takes place at a temperature of 250°C and a pressure of 5 MPa. The yield of this process is higher than that of the known processes.

2.3. Production of methanol.

3.

Example 2

1. Expansion plug.
- 2.1. The holes produced in masonry by drilling for inserting plastic plugs have different diameters depending on the composition of the masonry. This has a detrimental effect on the admissible load values of the known plugs. The new plug is meant to adapt to the widest possible range of bore diameters.
- 2.2. To give the plug spring properties similar to a clamping sleeve, one of the four longitudinal slots (6a) usually existing in the tubular plug runs along the entire length of the plug. In conjunction with the inner bore of the plug conically tapering towards the end of the plug, the plug casing fitted with ring ribs is well positioned on the walls of the bore hole (1 or 10), after the screw (3) has been screwed in.
- 2.3. Due to its bracing capability over its entire length, the plug is suitable for distance mounting; cf. distance between board (9) and brickwork in the drawing.



Example 3

1. Arrangement for the optional multiplication of the current and/or voltage values of flat solar generators.
- 2.1. The individual solar cell modules of known solar generators are interconnected by means of complex and hardly variable cabling. The new arrangement is intended to allow to connect solar cell modules of a type in series and/or parallel, in a simple and inexpensive way, and to quickly realise a variable design adapted to a particular use.
- 2.2. In each module (2), metal positive or negative contact sockets (11,12) are attached to opposite sides of the plastic module body (6), which pass through the body and are connected to the contact strips (9,10) of the solar cell arrangement (3, 4, 5). Adapted plug-in connections (13,14) made of conductive or insulating material are provided to electrically and mechanically connect the modules (2).
- 2.3. The arrangement enables virtually unlimited current and voltage gradations through any combination of series and parallel connections of solar cell modules of a single type so that possible applications of this solar cell module are in small appliances as well as in facade and roof claddings for the usage of energy.

