Europäisches Patentamt
European Patent Office
Office européen des brevets

EN

EUROPEAN QUALIFYING EXAMINATION 2015

Pre-examination

This paper comprises:

Instructions for answering the paper and marking scheme

1. The pre-examination is in the form of a multiple choice paper. It comprises 20 questions in all, 10 questions relating to legal knowledge (questions 1-10) and 10 questions relating to the analysis of claims (questions 11-20). Questions must be answered by filling in the circles on the answer sheet printed on the reverse side of your personal cover sheet. The duration of this examination is four hours.

a) Each question X has 4 separate statements, namely X.1, X.2, X.3 and X.4. For each statement X.1, X.2, X.3 and X.4 candidates must unambiguously indicate on the answer sheet whether the statement is true or false. For each statement X.1, X.2, X.3 and X.4 only one answer can be given, either true or false. Each statement within a question is to be considered independently of the other statements.

b) To indicate that a statement X.1, X.2, X.3 or X.4 is true, the corresponding circle for "true" should be filled using a black medium soft HB pencil. To indicate that a statement X.1, X.2, X.3 or X.4 is false, the corresponding circle for "false" should be filled using a black medium soft HB pencil.

c) If, in reply to a statement X.1, X.2, X.3 or X.4, no indication is given as to whether the statement is true or false, or if both true **and** false are indicated, then the answer to this statement will be deemed not to be correct. Accordingly, if a candidate fills or partly fills a circle they do not intend to submit as part of their answer, it is essential that any mark in that circle is fully erased.

d) There is no possibility for submitting notes or remarks to the examiner. Any such submission will be disregarded.

2. Only one answer sheet per candidate will be available.

3. Marking

a) Marks awarded per question

- If within one question X, none or only one of the answers to the statements X.1, X.2, X.3 and X.4 is correct, then 0 marks will be awarded for this question X.
- If within one question X, two of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 1 mark will be awarded for this question X.
- If within one question X, three of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 3 marks will be awarded for this question X.
- If within one question X, all four of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 5 marks will be awarded for this question X.

b) Total number of marks awarded

The total number of marks awarded for the pre-examination is the sum of the marks achieved for each question, calculated as stated above.

Legal questions

QUESTION 1

An inventor resident in San Marino validly filed a European patent application last week. He is considering appointing the professional representative before the EPO Mr. A to help him prosecute the application.

For each of the statements 1.1 – 1.4, indicate on the answer sheet whether the statement is true or false:

1.1 In this case, the inventor does not need to be represented by a professional representative before the EPO.

1.2 In this case, in order to be validly represented by Mr. A, a signed authorisation must be filed with the EPO.

1.3 If the inventor, after validly appointing Mr. A, wants to appoint a different professional representative before the EPO, Mr. B, from another association, then Mr. B need not provide a signed authorisation, if Mr. A informs the EPO of the change of representative.

1.4 For a change of attorney to be validly registered by the EPO, an administrative fee has to be paid.

QUESTION 2

A communication under Article 94(3) EPC is dated 15 January 2015. In the communication a time limit of four months is set for replying to objections raised by the examining division.

For each of the statements 2.1 – 2.4, indicate on the answer sheet whether the statement is true or false:

2.1 The communication is deemed to be delivered on Monday, 26 January 2015, because 25 January 2015 falls on a Sunday.

2.2 Without resorting to a legal remedy, the reply to the communication must be filed with the EPO at the latest on 26 May 2015.

2.3 Further processing for replying to said communication can be validly requested at the latest on Monday, 27 July 2015.

2.4 An extension of the time limit for the reply can be validly requested on 20 May 2015.

QUESTION 3

You filed an international application PCT-A on 21 February 2014 without claiming priority. The EPO as the International Searching Authority considered that the application did not comply with the requirement of unity of invention. The invention first mentioned in the claims was searched. An invitation to pay one additional search fee was sent to you. The invitation is dated 16 January 2015. You received the invitation on 19 January 2015.

For each of the statements 3.1 – 3.4, indicate on the answer sheet whether the statement is true or false:

3.1 The additional search fee can be validly paid on 26 February 2015.

3.2 Today, 23 February 2015, you can file an international application PCT-B validly claiming priority from PCT-A, wherein the claims of PCT-B are directed to the second invention.

3.3 A valid option would be to request a supplementary international search for the second invention of PCT-A to be carried out by the EPO.

3.4 According to the provisions of the PCT, the additional search fee is paid directly to the International Searching Authority.

QUESTION 4

The mention of the grant of a European patent EP-Z was published on 18 June 2014. The language of the proceedings of EP-Z was English. Mr. Kurz, a Czech citizen resident in Slovakia, wishes to file an opposition against that patent. He intends to use the European patent application EP-Y as a novelty destroying document. EP-Y was published in German.

For each of the statements 4.1 – 4.4, indicate on the answer sheet whether the statement is true or false:

4.1 The notice of opposition must be filed at the latest on 18 March 2015.

4.2 Mr. Kurz is entitled to a reduction of the opposition fee, if he first files the opposition in Czech and then timely files a translation in English.

4.3 Mr. Kurz need not file a translation of EP-Y.

4.4 If Mr. Kurz wants to use the Slovak language during oral proceedings, it is sufficient to notify the EPO one month before the oral proceedings.

QUESTION 5

Your client filed on 2 August 2012 an international application PCT-M without claiming priority. According to the written opinion established by the EPO as the International Searching Authority, the subject-matter of several claims of PCT-M lacks novelty.

For each of the statements 5.1 – 5.4, indicate on the answer sheet whether the statement is true or false:

5.1 In the present case, the latest date for entering the European phase without resorting to further processing was 2 February 2015.

5.2 If PCT-M enters the European phase on 27 March 2015, at least one further processing fee must be paid.

5.3 In view of the fact that the EPO considers that the subject-matter of several claims of PCT-M is not novel, it is mandatory to file amended claims on which the examination at the EPO is to be based.

5.4 One requirement for validly entering the European phase with PCT-M on 27 February 2015, is that a renewal fee must be paid.

QUESTION 6

Your client filed in September 2012 an international application PCT-N without claiming priority. PCT-N contains a drawing. Your client wants to enter the European phase and he wants to file amended claims.

For each of the statements 6.1 – 6.4, indicate on the answer sheet whether the statement is true or false:

6.1 In order for an amendment to PCT-N to be allowable under Article 123(2) EPC, the amendment cannot relate to unsearched subject-matter.

6.2 An amendment which is allowable under Article 123(2) EPC may be novel and inventive over the disclosure of PCT-N as filed.

6.3 An amendment which is allowable under Article 123(2) EPC may be based on subject-matter found only in the drawing of PCT-N.

6.4 An amendment is allowable under Article 123(2) EPC if it is based on subject-matter found only in the claims amended under Article 19 PCT.

QUESTION 7

For questions 7 and 8 consider the following situation:

The German company C filed in December 2013 a German utility model application DE-C directed to a solution of the substance X in water. The utility model was published in March 2014.
In November 2014 company C filed a European patent application EP-C claiming priority from DE-C. EP-C has three claims: claim 1 is directed to a solution of the substance X; claim 2, which is dependent on claim 1, is directed to a solution of the substance X in water; claim 3, which is dependent on claim 1, is directed to a solution of the substance X in alcohol.
In September 2014, the solution of the substance X in water was made available to the public in a scientific publication.
Company C has not filed any other applications.

For each of the statements 7.1 – 7.4, indicate on the answer sheet whether the statement is true or false:

7.1 It is possible to claim priority from utility model application DE-C for EP-C.
7.2 The effective date of claim 3 is the date of filing of EP-C.
7.3 If an independent claim is entitled to a priority date, then a claim depending from the independent claim must be entitled to the same priority date.
7.4 The first filing for a solution of the substance X in alcohol is EP-C.

QUESTION 8

For each of the statements 8.1 – 8.4, indicate on the answer sheet whether the statement is true or false:

8.1 Claim 2 of EP-C lacks novelty with respect to the scientific publication.

8.2 The scientific publication is state of the art under Article 54(2) EPC for claim 1 of EP-C.

8.3 DE-C is state of the art under Article 54(2) EPC for claim 3 of EP-C.

8.4 Claim 3 of EP-C lacks novelty with respect to the scientific publication

QUESTION 9

A European patent application EP-R was filed in December 2013 without claiming priority. The search division stated in the search opinion that the invention described in EP-R is not sufficiently disclosed. In the description of the invention of EP-R, reference is made to a co-pending European patent application EP-Q. EP-Q was filed with the EPO in October 2013.

For each of the statements 9.1 – 9.4, indicate on the answer sheet whether the statement is true or false:

9.1 The skilled person has the same level of skill for assessing inventive step and sufficient disclosure.

9.2 The finding of the search division with respect to lack of sufficiency of disclosure of EP-R cannot be contested in examination proceedings before the EPO.

9.3 The skilled person may use common general knowledge to carry out the invention.

9.4 A condition for taking EP-Q into account in the assessment of sufficiency of disclosure is that EP-Q was made available to the public no later than on the publication date of EP-R.

QUESTION 10

The mention of the grant of European patent EP-X was published in September 2014. The patent proprietor is company CE and Ms Smith is mentioned as the inventor. Ms Smith is a former employee of company CE. She left company CE in November 2014 after a dispute. Ms Smith is resident in Great Britain.

For each of the statements 10.1 – 10.4, indicate on the answer sheet whether the statement is true or false:

10.1 Ms Smith can validly file an opposition against EP-X, although she is mentioned as the inventor.

10.2 A candidate preparing for the European qualifying examination who is resident in the EU can validly file an opposition in his own name against EP-X, for training purposes.

10.3 Ms Smith can validly file an appeal against the decision to grant EP-X.

10.4 The professional representative before the EPO Mr Singer can validly file an opposition in his own name on behalf of Ms Smith and without naming Ms Smith as the opponent.

Description of the application

Fire protection door

[**0001**] The invention relates to fire protection doors.

[**0002**] Fire protection doors prevent fire from propagating between different parts of a building. A fire protection door must include a door leaf, a door frame and a door closer. The door leaf and the door frame cooperate to prevent hot gases from passing through the closed door during a minimum protection time. The door closer has to ensure that the fire protection door is closed in the case of a fire. The temperature of the side of the door facing away from the fire must not rise above prescribed maximum temperatures.

[**0003**] Up to now, fire protection doors have only been produced by the metal industry. The known fire protection doors have door leaves made of a metal casing. The metal casing normally is made using metal sheets to form a box and a cover. The space inside the box is filled with a thermally insulating material. Such known metal door leaves have a thickness of 5 cm or more.

[**0004**] This known construction of a fire protection door has several drawbacks. First of all, the appearance and the shape of the door are very limited due to the metal sheets forming the metal casing. Further, the metal casing provides a thermal bridge so that it is difficult to comply with the requirement that the temperature at the side of the door leaf facing away from the fire has to be kept low. Moreover, the known door leaves tend to bend in case of fire: the metal sheet on the fire side of the door leaf expands more than the metal sheet on the cooler side facing away from the fire. This bending may create a gap between the door frame and the door leaf and is the main reason for failure of fire protection doors. Hence, the known door leaves made of metal casings have to be stiffened, for example by additional internal frame structures within the metal casing.

[**0005**] The object of the invention is to overcome these drawbacks.

[**0006**] An aspect of the invention relates to a door leaf for a fire protection door wherein the door leaf has a plate made of solid wood. For example, the door leaf comprises a plate of solid oak wood. Solid wood is readily available and is resistant to bending.

[**0007**] Although wood is flammable, surprisingly it has been shown that a thick plate of solid wood used as a door leaf is able to withstand a fire for some time. Further, wood is heat-insulating so that no further filling is necessary. Our fire protection doors are produced in the wood manufacturing industry that differs considerably both in manufacturing machines and manufacturing techniques from the metal industry.

[**0008**] One important condition for using a solid wood plate for door leaves of fire protection doors is that the plate is thick enough. With regard to solid oak wood, the plate must have a thickness of at least 8 cm, otherwise the requirements for fire protection doors cannot be fulfilled and the plate will not be suitable for a fire protection door leaf.

[**0009**] Solid wood contains mainly wood fibres that can store moisture. For manufacturing our fire protection door leaf, we preferably use wood that is watered for a sufficient time so that the wood fibres contain enough moisture. When the wooden plate is heated in case of a fire, this moisture is released and evaporates. The evaporation of the moisture provides a cooling effect.

[**0010**] Preferred embodiments are explained in further details with reference to the drawings.

Claim analysis

[**0011**] Fig. 1 shows a sectional view through a fire protection door comprising a door leaf based on wood material.

[**0012**] Fig. 2 shows a front view of a first embodiment of the fire protection door constructed as a pivoting door.

[**0013**] Fig. 3 shows a second embodiment of the fire protection door constructed as a sliding door.

[**0014**] First, the general construction of a door leaf 1 for a fire protection door 10 is explained with reference to Fig. 1. As shown in Fig. 1, a door leaf 1 for a fire protection door 10 has an inner core formed as a plate 2 of solid oak wood having a thickness D of at least 8 cm. Solid oak wood burns very slowly. When using any other type of solid wood, the thickness D must be at least 10 cm.

[**0015**] Preferably, both major surfaces A and B of the plate 2 are at least partially covered by covering layers. By choosing appropriate coverings, the appearance of the door can be adapted to the building where it will be used. The plate 2 of wood can also be made in many different shapes by easy manufacturing steps known in the wood industry. Thus, for example, even very old buildings can be protected by fire protection doors imitating the appearance of ancient doors.

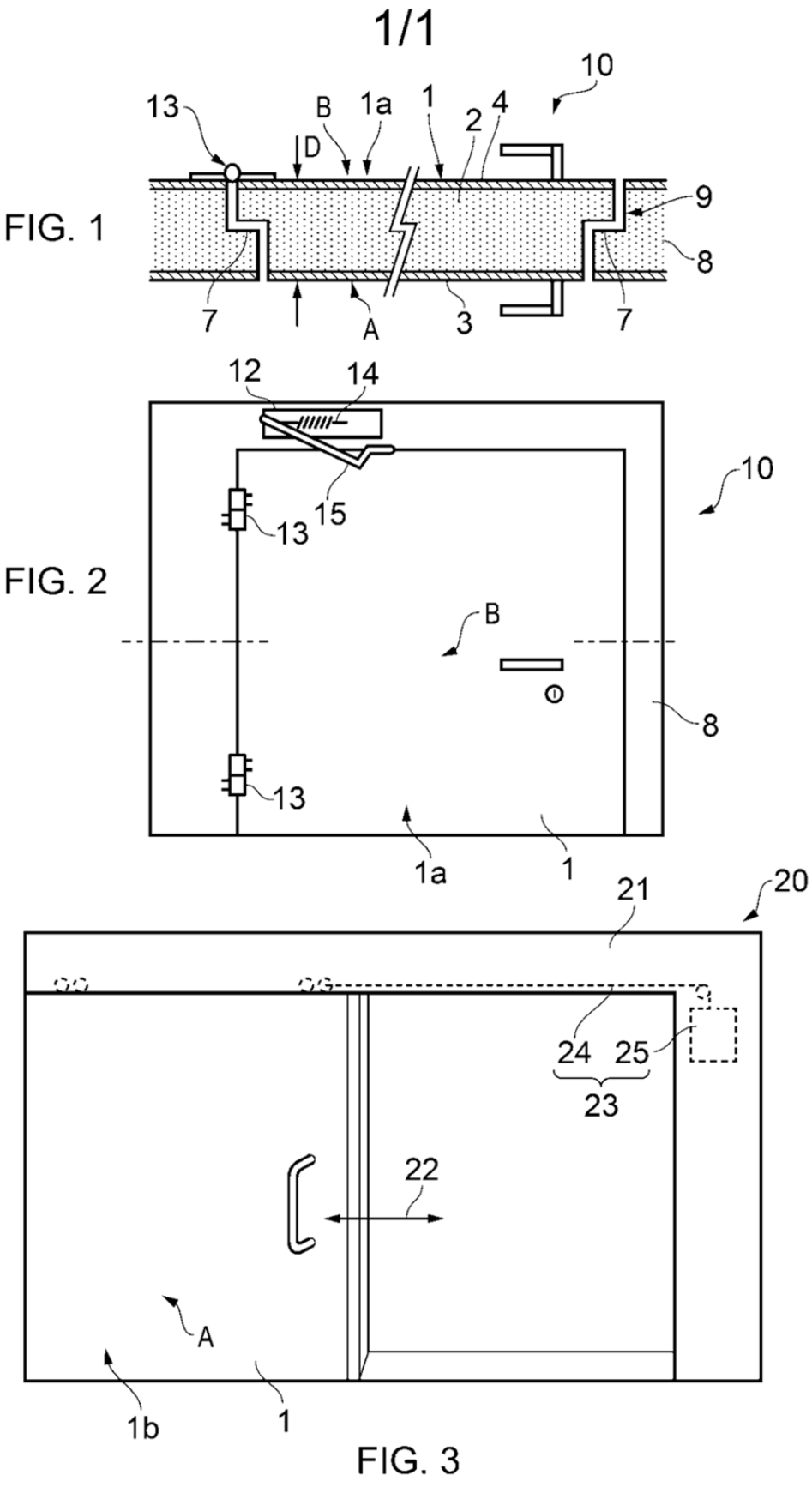
[**0016**] Preferably, the plate 2 is at least partially covered by a metal layer 3, 4. More preferably, both major surfaces A, B of the plate 2 are fully covered by aluminium sheets as metal layers 3, 4. A full covering of the wooden plate 2 by metal layers 3, 4 protects the wooden plate from drying-out. Aluminium has a melting temperature of about 600°C. In a case of fire, the temperature of the door on the fire side exceeds this temperature and the aluminium layer melts. The melting of the covering metal layers 3, 4 helps to keep the temperature low at the side of the door leaf 1 facing away from the fire.

[**0017**] When the door leaf 1 is used in a pivoting door hinged in pivotal manner to a door frame 8, the side edges of door leaf 1 are stepped, and a corresponding step 7 is provided in the door frame 8. In the closed position, the engagement between the stepped door leaf 1 and the stepped door frame 8 provides a kind of labyrinth seal 9 that hinders hot gases from passing the door. However, such a stepped door leaf 1 is not suited for sliding doors. Many different sizes and shapes of steps are possible, however the step in the door leaf 1 and the step 7 in the door frame 8 must fit to each other; hence, door leaf 1 and door frame 8 of the fire protection door 10 are specially adapted to each other.

[**0018**] The first embodiment of the fire protection door 10 shown in Fig. 2 has a stepped door leaf 1a, a door frame 8 and a door closer 12. The door leaf 1a is connected via door hinges 13 to the door frame 8 so that it can pivot between a closed and an open position. The door closer 12 biases the door leaf 1a into the closed position. The door closer 12 has a mechanical spring 14 urging the door leaf 1a to the closed position via a lever element 15.

[**0019**] Fig. 3 shows the second embodiment. The fire protection door is a sliding fire protection door 20 having a door leaf 1b and a door frame 21 wherein the door leaf 1b is slidably guided to slide in a direction 22 parallel to its major surfaces. Further, a door closer 23 is provided including a cable 24 and a weight 25. The cable 24 and the weight 25 are hidden within the door frame 21. Because the elements of the door closer 23 are hidden, the door closer 23 is protected from interference and a very safe functioning is ensured.

Drawings of the client's application



QUESTION 11

Assume that the client proposes the following alternatives as single independent claim for the patent application:

A) Door leaf in a fire protection door, wherein the door leaf comprises a solid wood plate having a thickness of 5 cm or more.

B) Door leaf for a fire protection door, the door leaf having a step at an edge region, wherein the step matches with a step in a door frame.

C) Fire protection door comprising a door leaf, a door frame and a door closer wherein the door leaf comprises a plate made of solid wood.

For each of the statements 11.1 to 11.4, indicate on the answer sheet whether the statement is true or false.

11.1 Claim A) clearly defines that protection is sought for a door leaf independently of a door frame and a door closer.

11.2 Claim A) is supported by the description.

11.3 Claim B) meets the requirements of Article 84 EPC.

11.4 Claim C) meets the requirements of Article 84 EPC.

QUESTION 12

For this question, assume that the client proposes the following claim as single independent claim for the patent application.

Door leaf for a fire protection door, wherein the door leaf comprises a plate containing wood fibres, wherein

a) the plate is a solid wood plate,
b) the plate has a thickness of 8 cm or more,
c) the plate is watered to contain moisture,
d) each major surface of the plate is fully covered with an aluminium sheet, and
e) the door leaf is configured such that it can be closed by a door closer.

For each of the statements 12.1 to 12.4, indicate on the answer sheet whether the statement is true or false.

Considering the invention, its effects and advantages as given in the description,…

12.1 …feature b) is an unnecessary limitation of the scope of the claim.

12.2 …feature c) is an unnecessary limitation of the scope of the claim.

12.3 …feature d) is an unnecessary limitation of the scope of the claim.

12.4 …feature e) is an unnecessary limitation of the scope of the claim.

Claim analysis

Claim Set I

For questions 13 to 16 assume that the following claims have been initially filed with the patent application and that a European Search report cites documents D1, D2, and D3, all published prior to the date of filing of the patent application:

I.1. Door leaf, wherein the door leaf comprises a plate including a material containing fibres.

I.2. Door leaf according to claim I.1, wherein the fibres are wood fibres.

I.3. Door leaf according to claim I.1, wherein the plate is made of solid wood.

I.4. Door leaf according to claim I.1, wherein the material of the plate is such that it delivers moisture when heated.

I.5. Door leaf according to claim I.2, wherein the plate is at least partially covered by a metal material.

I.6. Door leaf according to claim I.2, wherein both major surfaces of the plate are covered by an aluminium layer.

I.7. Door comprising a door leaf according to claim I.1, a door frame, and a biasing means for biasing the door leaf into a predetermined position.

I.8. Door comprising a door leaf according to claim I.1 and a biasing means, wherein the biasing means has a cable and a weight or wherein the biasing means has a mechanical spring and a lever element.

I.9. Door comprising the door leaf of claim I.1 and a door frame, wherein the door is a fire protection door.

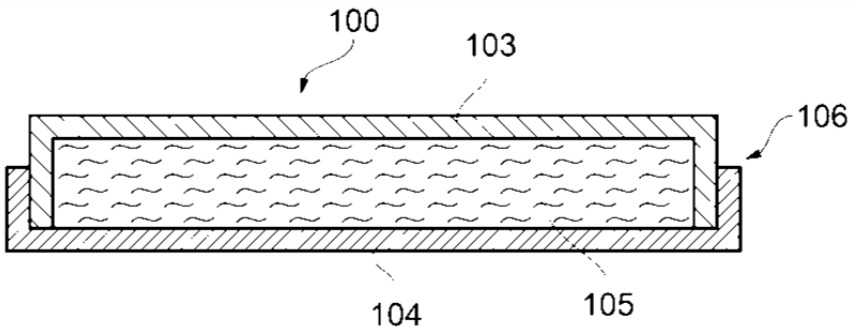
I.10. Door comprising a door leaf of claim I.1, wherein the door leaf has a stepped edge.

Document D1: Metal door leaf for fire protection door

[**0001**] The invention relates to door leaves for fire protection doors. Door leaves for fire protection doors must withstand fire for a sufficient time wherein the side facing away from the fire must not become too hot.

[**0002**] The figure shows a sectional view through a metal door leaf 100 for a hinged fire protection door. Although different metal materials can be used for the door leaf, steel is preferred. Steel has a melting point above 1300°C so that it can withstand temperatures occurring during fire and maintains its stiffness even at higher temperatures.

[**0003**] The door leaf 100 has a first metal sheet 103 formed like a box and a second metal sheet 104 formed as a cover, the two overlapping on the sides 106 of the door leaf 100. The inner space is filled with a calcium silicate plate 105. The calcium silicate plate 105 is made of a cardboard that contains calcium silicate. The cardboard comprises wood fibres distributed within the plate 105. The calcium silicate stores a lot of water. In case of a fire, the water is released and evaporates due to the heat energy causing the water to change from a liquid to a gas. Thus, due to the filling, the door leaf is cooled in case of fire. Further, the calcium silicate plate 105 is thermally insulating during normal use of the door leaf 100. In order to reduce the tendency to bend, a stiffening steel frame structure (not shown) must be provided in the inner space. Although the insertion of the frame structure is quite complicated it is necessary to ensure a sufficient stiffness of the door leaf 100 in case of fire.



Document D2: Vintage Art Journal

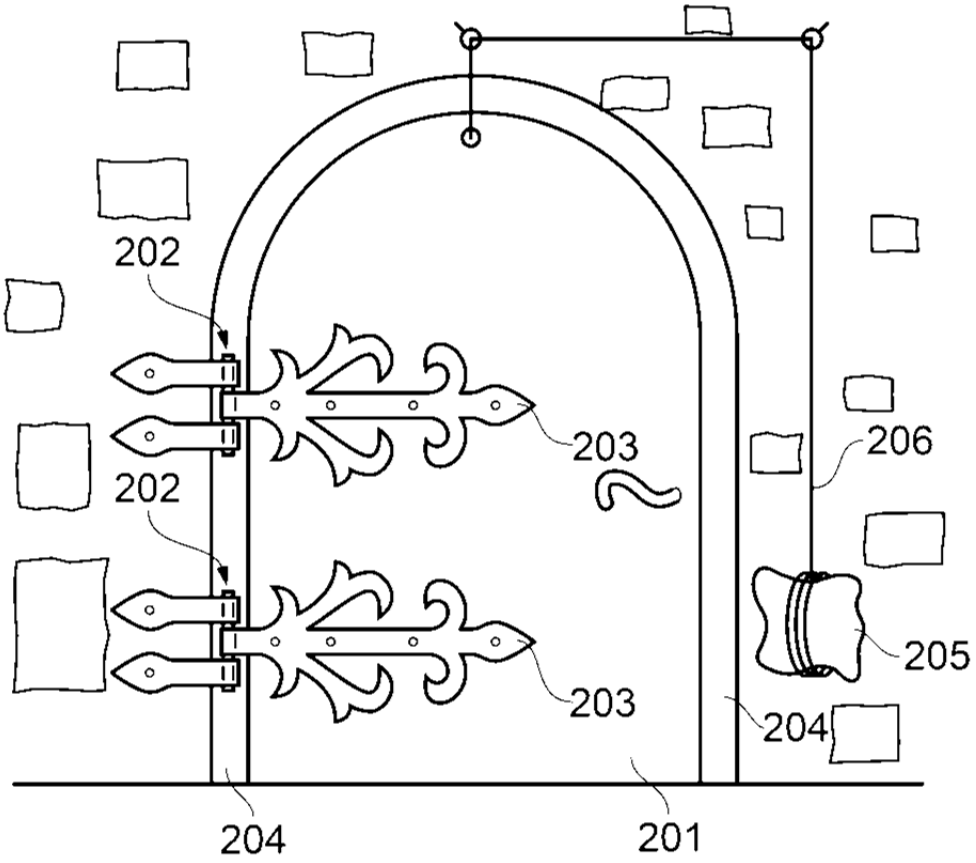
Fire endangers art treasures in Bavarian Alps

by Peter Murphy

[**0001**] In the Alps between the lakes of Tegernsee and Schliersee there is a charming village with a Catholic church built in the 14th century. The entrance leads into a small room with several hundred burning candles. This room is separated from the main room that contains antique furniture and old masterpieces of art by a very nice heavy door (see figure). The door is made of a plate 201 made of a single piece of wood with a minimum thickness of 8 cm and a weight of more than a hundred kilograms. The door is supported by hinges 202 having metal bands 203 that cover a large area of the wood plate and that also give the door its remarkable appearance. The door hinges 202 are not only fixed to the wooden frame 204, but also to the stone wall surrounding the door opening. The door is provided with a rock 205 on a cable or a rope 206 for biasing the door to a closed position.

[**0002**] Several years ago the candles in the small entrance room caused a fire that burnt for almost an hour before the firemen could get it under control. Although the furniture in the small room that stood close to the door was totally destroyed, the door prevented the fire from entering the main room. The old wood plate of the door was burnt on the side facing the small room but remained intact on the other side.

Drawing of D2



Document D3: Emergency exit sliding door

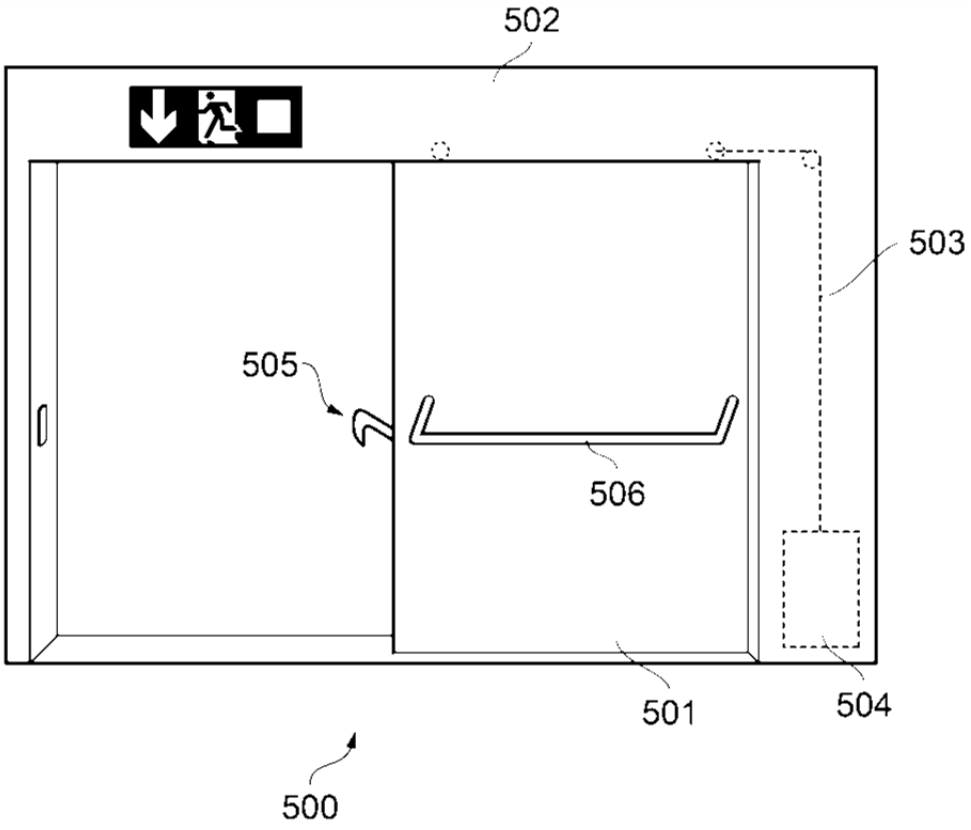
[**0001**] The invention relates to a door for an emergency exit. It is necessary to provide emergency exits for evacuating people from a public building. Particularly in crowded spaces there is the risk that people panic and try desperately to exit to a safe place. Any obstacles on the exit routes hinder the escape of people and can cost lives.

[**0002**] Pivoting doors in emergency exits normally open to the outside so that they swing out of the way of the exiting people. However, with sliding doors, the doors have to be slid to the side and can be blocked when a mass of people pushes against the door leaf.

[**0003**] To provide a solution to this problem, the invention proposes a sliding door 500 that can be used as an emergency exit door. This sliding door comprises a door leaf 501 guided in a slidable manner within a door frame 502 as well as a cable 503 and a weight 504 biasing the door leaf into the fully opened state as shown in the figure. To close, the door leaf 501 has to be moved against the biasing force of the weight 504 into the fully closed state (to the left in the figure). The door has a lock with a hook-like member 505 that holds the door leaf in its closed position. The lock has a panic handle 506 on the interior side. Pushing against the panic handle 506 releases the lock; and the door leaf 501 is immediately moved into the fully opened position enabling the people to exit. To ensure a safe function, the biasing mechanism can be hidden within the internal spaces in the door frame 502.

[**0004**] To facilitate the movement of the door leaf 501, the door leaf 501 is made of light and thin board containing fibres such as cardboard. Since the door 500 is only used as an emergency exit door, layers of any material such as aluminium or wood can be used as the outer surfaces.

Drawing of D3



QUESTION 13

For each of the statements 13.1 to 13.4, indicate on the answer sheet whether the statement is true or false.

13.1 The subject-matter of claim I.4 is novel over D1.

13.2 The subject-matter of claim I.6 is novel over D1.

13.3 The subject-matter of claim I.5 is novel over D2.

13.4 The subject-matter of claim I.8 is novel over D2.

QUESTION 14

For each of the statements 14.1 to 14.4, indicate on the answer sheet whether the statement is true or false.

14.1 The first and second embodiments of the application fall within the scope of claim I.7.

14.2 The first embodiment of the application falls within the scope of claim I.8.

14.3 The second embodiment of the application falls within the scope of claim I.8.

14.4 The second embodiment of the application falls within the scope of claim I.10.

QUESTION 15

For each of the statements 15.1 to 15.4, indicate on the answer sheet whether the statement is true or false.

15.1 The subject-matter of claim I.9 is novel over D3.
15.2 The subject-matter of claim I.6 is novel over D3.
15.3 The subject-matter of claim I.8 is novel over D3.
15.4 The subject-matter of claim I.10 is novel over D3.

QUESTION 16

For each of the statements 16.1 to 16.4, indicate on the answer sheet whether the statement is true or false.

The following amendments are allowable under Article 123(2) EPC:
16.1 a combination of claims I.1, I.2, I.3, and I.4.
16.2 a combination of claims I.1, I.8 and I.10.
16.3 a combination of claims I.1, I.7 and I.10.
16.4 an amendment of the dependency of claim I.5 to be dependent from claim I.1 instead of claim I.2.

Claim set II

For questions 17 to 20, assume that a European patent is granted with the following claims and that an opposition has been filed citing the documents D1, D2, and D3.

II.1. Door leaf for a fire protection door comprising a plate containing wood fibres, characterised in that the major surfaces of the plate are fully covered with an aluminium layer.

II.2. Door leaf according to claim II.1, wherein the material of the plate includes solid wood and the material is such that it delivers moisture when heated.

II.3. Door comprising a door leaf according to claim II.2, a door frame, and a biasing means for biasing the door leaf into a predetermined position.

II.4. Door, especially fire protection door, the door having a door leaf, a door frame and a biasing means for biasing the door leaf into a predetermined position, the door leaf comprising a plate containing wood fibres, wherein the major surfaces of the plate are at least partially covered with an aluminium layer.

II.5. Door according to claim II.4, wherein the plate is made of solid wood, and the door has a door closer and is a pivoting door, wherein the door leaf is pivotably connected to the door frame by means of hinges.

II.6. Door according to claim II.5, wherein the door is a fire protection door that comprises a door leaf according to claim II.2, and the door leaf has a stepped edge engagable with a step in the door frame.

II.7. Fire protection door according to claim II.4, wherein the biasing means is a door closer comprising a cable and a weight for biasing the door leaf into the closed position.

QUESTION 17

For each of the statements 17.1 to 17.4, indicate on the answer sheet whether the statement is true or false.

17.1 D1 is the closest prior art with regard to claim II.1.

17.2 D2 is the closest prior art with regard to claim II.5.

17.3 The subject-matter of claim II.4 is disclosed in D3.

17.4 D3 is the closest prior art with regard to claim II.7.

QUESTION 18

For each of the statements 18.1 to 18.4, indicate on the answer sheet whether the statement is true or false.

18.1 A technical effect of the solid wood plate of claim II.2 is reducing the tendency of the door leaf to bend in the event of fire.

18.2 A technical effect of the solid wood plate of claim II.2 is providing heat insulation.

18.3 The technical effect of the biasing means of claim II.3 is to ensure that the door is always closed in case of fire.

18.4 The wood fibres of the solid wood plate of claim II.2 and the aluminium layer of claim II.1 do not show a functional interaction to achieve a combined technical effect.

QUESTION 19

For each of the statements 19.1 to 19.4, indicate on the answer sheet whether the statement is true or false.

19.1 An element of the objective technical problem solved by the subject-matter of claim II.2 over D1 is to simplify the construction.

19.2 An element of the objective technical problem solved by the subject-matter of claim II.2 over D1 is to provide fire protection doors imitating the appearance of ancient doors.

19.3 A valid argument as to why a skilled person would not combine D1 and D2 to arrive at the subject-matter of claim II.2 is that D1 is a patent document and D2 is a journal in the field of vintage art.

19.4 A valid argument as to why a skilled person would combine D1 and D2 is that D1 discloses a door leaf for a fire protection door and D2 teaches that a solid wood plate is a suitable material for a door leaf that prevents propagation of fire.

QUESTION 20

As auxiliary request, the patent is defended in the opposition with the following independent claim:

Fire protection door comprising a door leaf, a door frame and a door closer, the door leaf comprising a plate made of solid wood,
wherein the door is a pivoting door and wherein the door leaf is pivotably connected to the door frame by means of hinges;
characterised in that

a) the major surfaces of the plate are fully covered with an aluminium layer,
b) the material of the plate is treated such that it releases moisture when heated, and
c) the door leaf has a stepped edge engageable with a step in the door frame.

The opponent cites D2 as closest prior art with regard to this claim. The opponent acknowledges that the subject-matter of the claim of the auxiliary request differs from D2 in the features of the characterising portion of the claim.

The opponent defines the objective problem with regard to D2 as to enhance the fire protection function of a fire protection door.

Claim analysis

For each of the statements 20.1 – 20.4, indicate by marking true or false on the answer sheet whether the statement is a valid argument as to why it is not obvious to solve the stated objective technical problem by the features of the claim.

20.1 Although D3 discloses a door leaf covered by an aluminium layer, there is no teaching in D3 that this could improve a fire protection function.

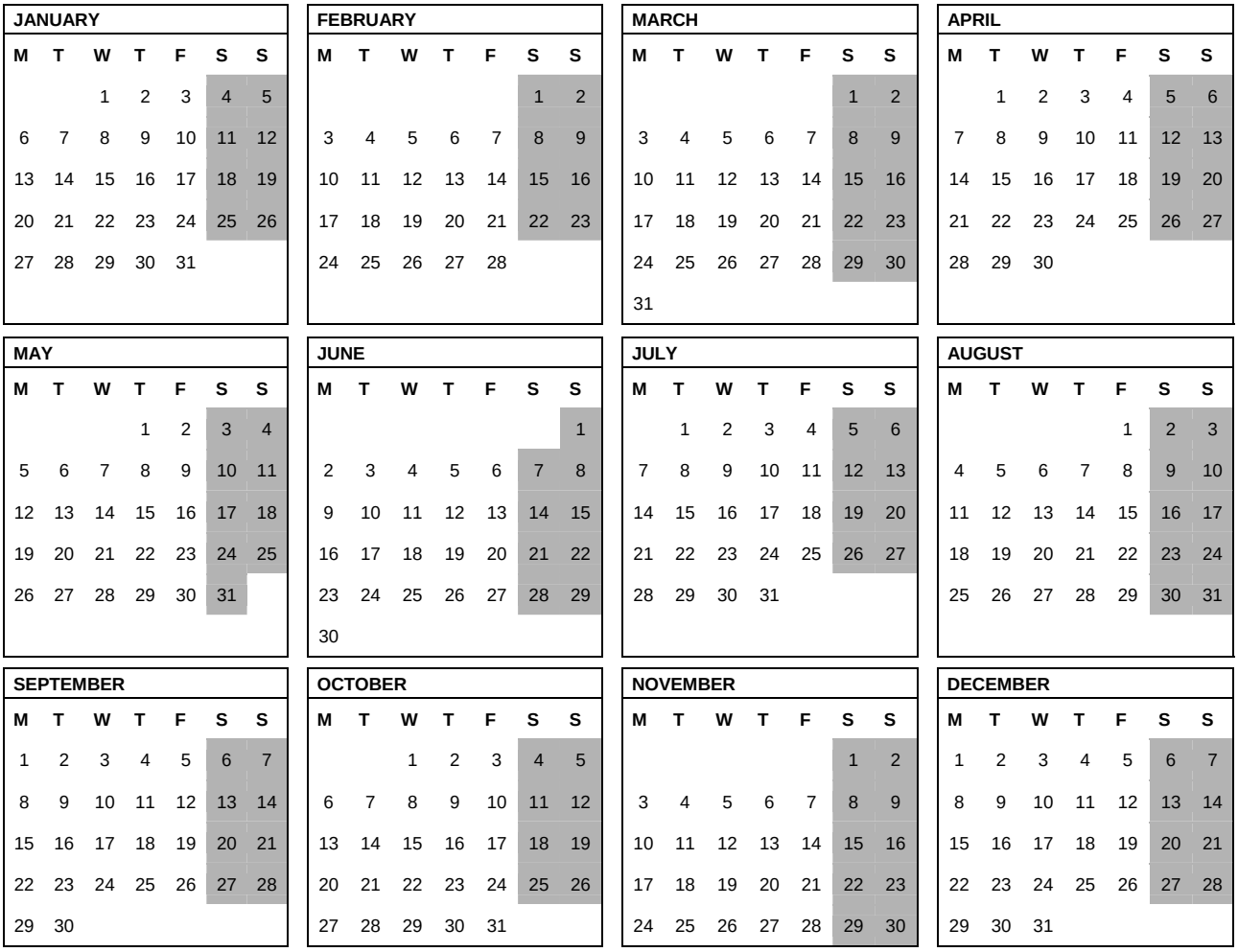
20.2 Although D1 discloses a material that is such that it delivers moisture when heated, there is no teaching that solid wood of D2 could replace the material of D1.

20.3 Although the figure of D1 shows a small step on the side of the door leaf due to an overlap of metal sheets, this step is only because two edge portions of the metal sheets overlap; there is no teaching to combine a step in a door leaf with a step in a door frame to come to a better sealed door gap.

20.4 D1 teaches away from using aluminium in fire protection doors.

Annex 1

2014



JANUARY						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY						
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE						
M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST						
M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

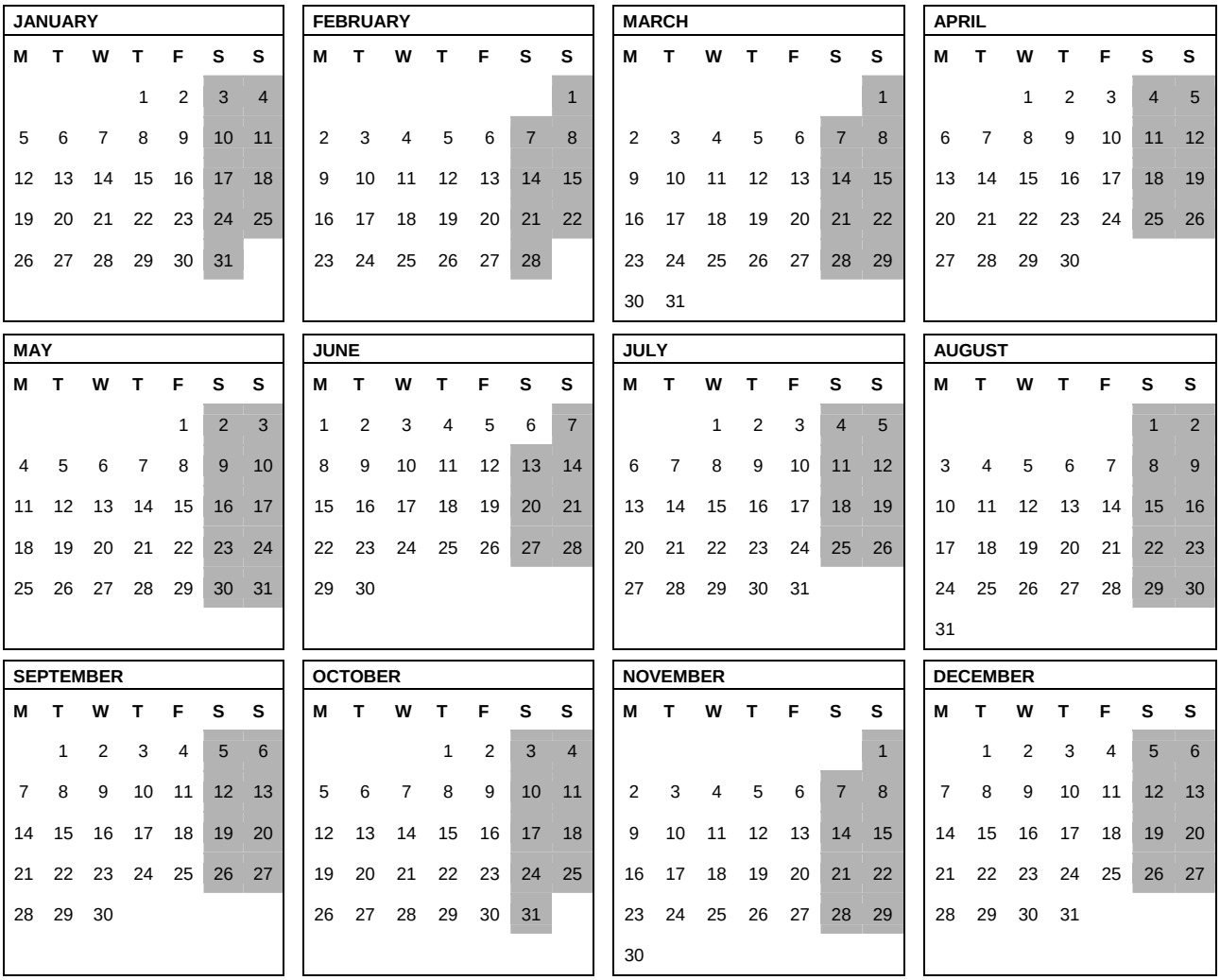
NOVEMBER						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Tage / Days / Jours		München Munich	Den Haag The Hague La Haye	Berlin
Neujahr - New Year's Day - Nouvel An	01.01.2014	x	x	x
Heilige Drei Könige - Epiphany - Epiphanie	06.01.2014	x		
Karfreitag - Good Friday - Vendredi Saint	18.04.2014	x	x	x
Ostermontag - Easter Monday - Lundi de Pâques	21.04.2014	x	x	x
Maifeiertag - Labour Day - Fête du Travail	01.05.2014	x	x	x
Christi Himmelfahrt - Ascension Day - Ascension	29.05.2014	x	x	x
Pfingstmontag - Whit Monday - Lundi de Pentecôte	09.06.2014	x	x	x
Fronleichnam - Corpus Christi - Fête-Dieu	19.06.2014	x		
Mariä Himmelfahrt - Assumption Day - Assomption	15.08.2014	x		
Tag der Deutschen Einheit - Day of German Unity - Fête Nationale	03.10.2014	x		x
Heiliger Abend - Christmas Eve - Veille de Noël	24.12.2014	x	x	x
1. Weihnachtstag - Christmas Day - Jour de Noël	25.12.2014	x	x	x
2. Weihnachtstag - Boxing Day - Lendemain de Noël	26.12.2014	x	x	x
Silvester - New Year's Eve - Saint-Sylvestre	31.12.2014	x	x	x

Annex 2

2015



Tage / Days / Jours		München Munich	Den Haag The Hague La Haye	Berlin
Neujahr - New Year's Day - Nouvel An	01.01.2015	x	x	x
Heilige Drei Könige - Epiphany - Epiphanie	06.01.2015	x		
Karfreitag - Good Friday - Vendredi Saint	03.04.2015	x	x	x
Ostermontag - Easter Monday - Lundi de Pâques	06.04.2015	x	x	x
Nationalfeiertag - National Holiday - Fête nationale	27.04.2015		x	
Maifeiertag - Labour Day - Fête du Travail	01.05.2015	x	x	x
Christi Himmelfahrt - Ascension Day - Ascension	14.05.2015	x	x	x
Pfingstmontag - Whit Monday - Lundi de Pentecôte	25.05.2015	x	x	x
Fronleichnam - Corpus Christi - Fête-Dieu	04.06.2015	x		
Heiliger Abend - Christmas Eve - Veille de Noël	24.12.2015	x	x	x
1. Weihnachtstag - Christmas Day - Jour de Noël	25.12.2015	x	x	x
Silvester - New Year's Eve - Saint-Sylvestre	31.12.2015	x	x	x