

Understanding of the International Preliminary Examination Report (IPER) and Written Opinion (WO)

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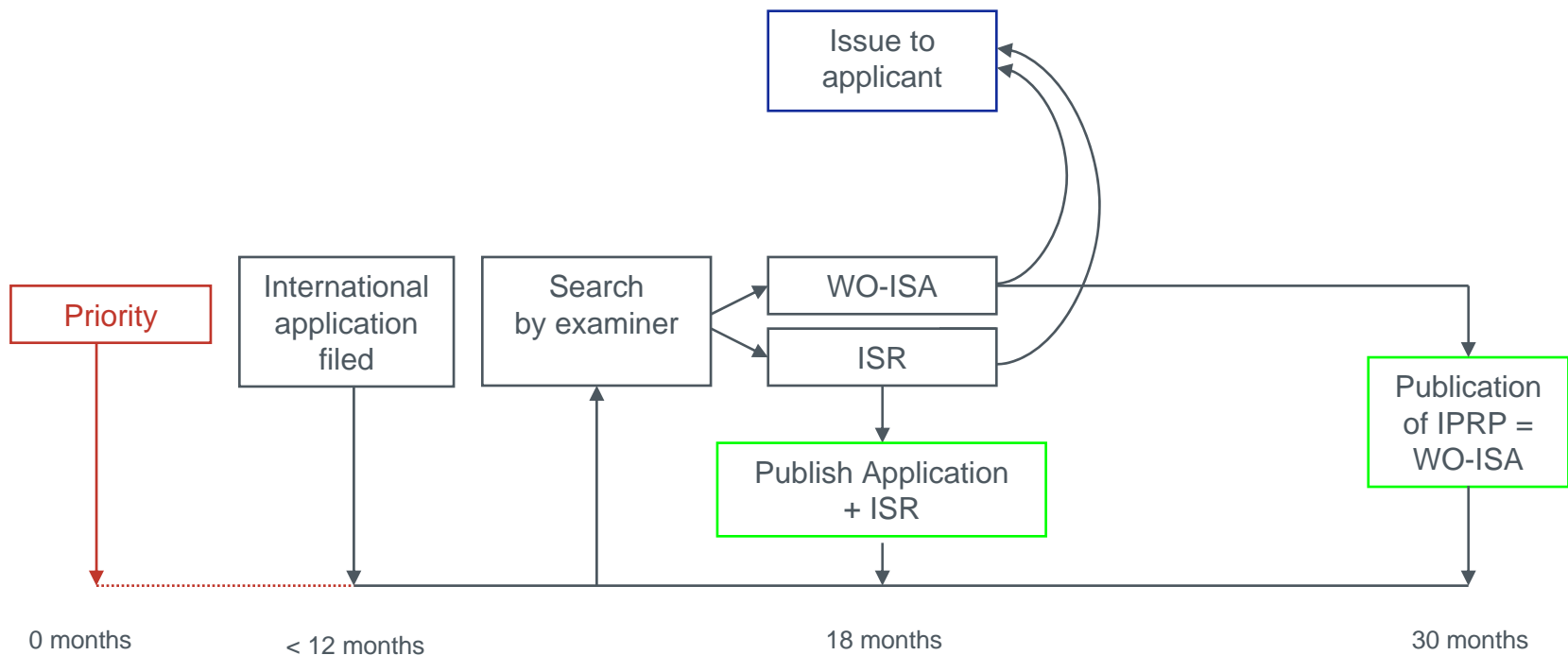
Overview

- Overview of International Search Authority actions
 - what is a WO-ISA and a IPRP?
 - what is a IPER?
- The form of a WO-ISA / IPER
 - cover sheet of the WO-ISA / IPER
 - boxes I - VIII
 - separate Sheet with examples

International Search Authority actions

PCT with PCT chapter 1 (no PCT chapter 2 examination)

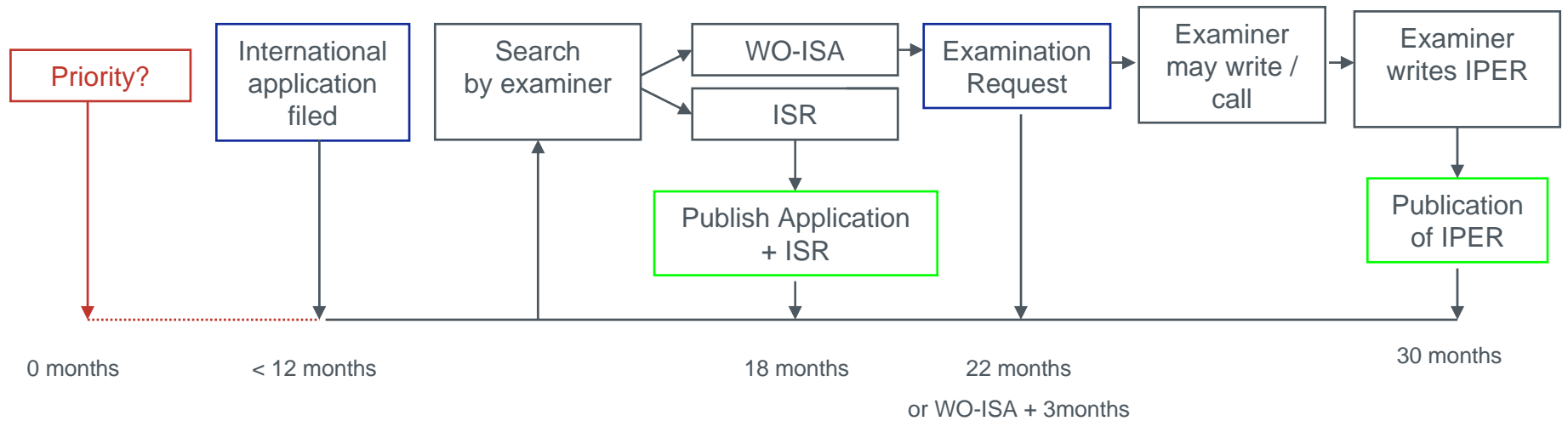
- WO-ISA to IPRP (International Preliminary Report on Patentability)



International Search Authority actions

PCT with PCT chapter 2 (examination)

- IPER (International Preliminary Examination Report)



Overview of the structure of WO-ISA, IPRP, IPER

- The cover sheet
- Box I - Basis of the opinion
- Box II - Priority
- Box III - Non-establishment of opinion
- Box IV - Lack of unity
- Box V - Novelty and Inventive step
- Box VI - Certain documents cited
- Box VII - Certain defects
- Box VIII - Certain observations (clarity)

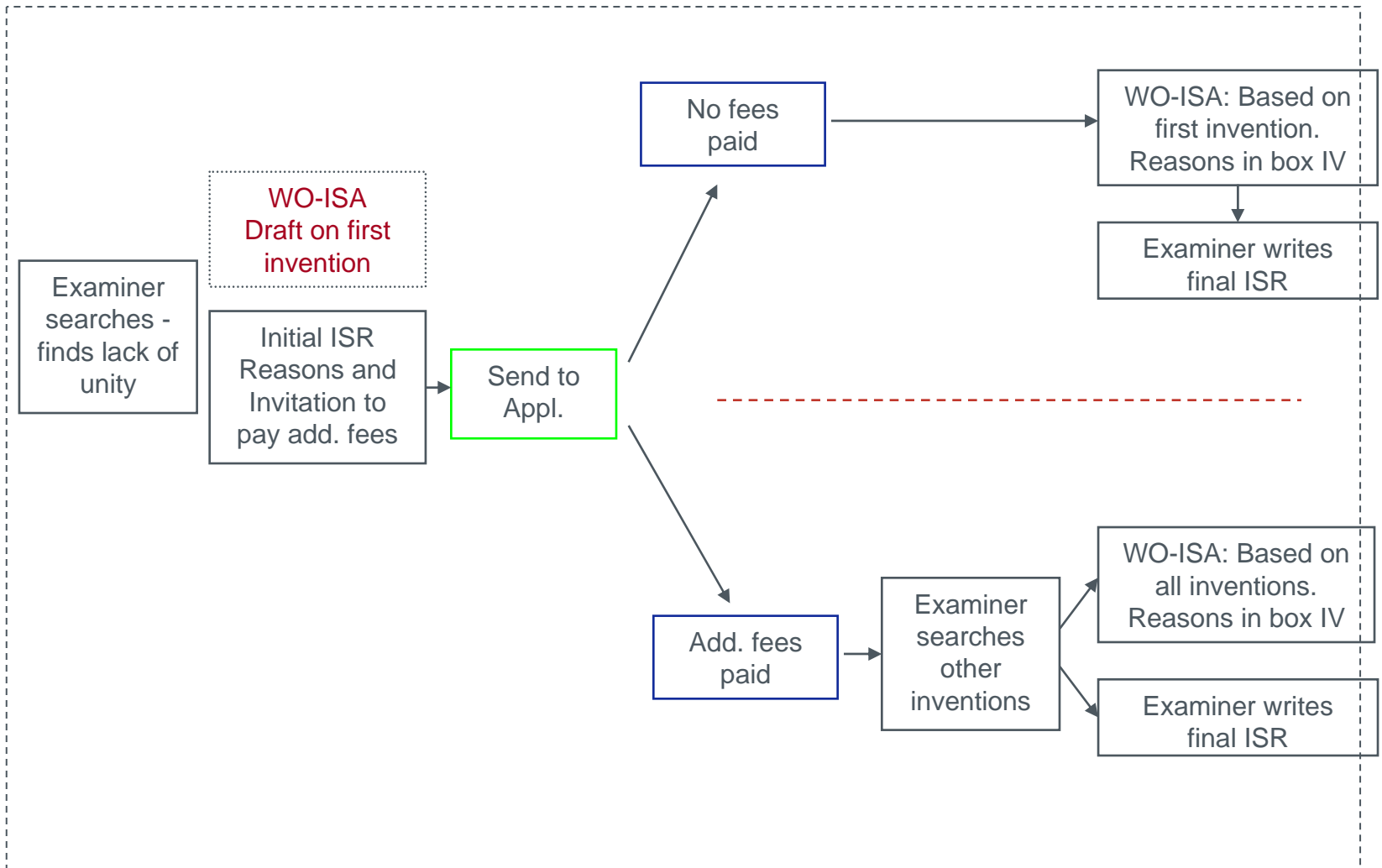
Box I and Box II

- Box I
 - Indication of language
 - Corrections
 - Nucleotide and/or Amino Acid Sequence listings
- Box II
 - Priority document not available
 - Validity of priority document

Box III - Non-establishment of opinion

- Extent to which no opinion is given, i.e. which claims
- Reasons:
 - excluded subject-matter
 - mathematical theories, plants / animals, business methods
 - unclear (so unclear than no meaningful opinion can be formed)
 - lack of support
 - problems with nucleotide and/or amino acid sequence listings

Box IV - Lack of unity - process



Box IV - Lack of unity

- Groups
- Reasoning for lack of unity

If following the initial search report the application pays for all inventions:

- all inventions are searched and covered in the WO-ISA

If the applicant does not pay:

- only the first invention forms basis of the opinion

Box IV - Lack of unity

- Example of text in separate sheet

This Authority considers that there are 2 inventions covered by the claims indicated as follows:

I: Claims 1-10 are directed to a lamp.

II: Claims 11-20 are directed to a remote control for a lamp.

The reasons for which the inventions are not so linked as to form a single general inventive concept, as required by Rule 13.1 PCT, are as follows:

The subject-matter of the 1st invention concerns colour control of a lamp. The problem to be solved is how control the current to the lamp to obtain the desired colour. The solution is obtained by PWM control of the current.

The subject-matter of the 2nd invention concerns commanding a lamp with a remote control. The problem is how the user selects and the transmission of a control signal to a lamp. The solution involves a user selection keypad and bluetooth communication.

Consequently, neither the objective problem underlying the subjects of the claimed inventions, nor their solutions defined by the special technical features allow for a relationship to be established between the said inventions, which involves a single general inventive concept.

Box V - Novelty and Inventive step

- Each claim is listed with respect to novelty, inventive step and industrial applicability

For example:

1. Statement

Novelty (N)	Yes:	Claims 5-10, 12-15
	No:	Claims 1-4, 11
Inventive step (IS)	Yes:	Claims 8
	No:	Claims 1-7, 9-15
Industrial applicability	Yes:	Claims 1-15
	No:	Claims

Box V - Separate sheet, novelty

- Example of a novelty objection:

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1 WO 91/19237 A1

D2 US 2011/032695 A1

Novelty example continued

- 1 The subject-matter of independent claims 1 and 10 does not meet the requirements of Article 33(2) PCT.

D1 discloses:

An illumination system for lighting a building (fig. 1; house 4) comprising:

an array of LED lights (fig. 2; LED array 100),

an movement detection device (fig. 2, motion detection 200),

a micro-controller (fig. 2; microprocessor 15),

wherein when a signal from said movement detection device is above a threshold level (fig. 3; comparator 20 compares V_{ref} to V_{det}), said micro-controller switches said array of lights to an illumination state (see paragraph [0016]).

Hence the subject-matter of claim 1 is not new.

- 1.1 The subject-matter of the corresponding method claim 10 is also not new.

Box V - Novelty D2

- The examiner normally will only give one full novelty objection
- However, if D2 is an "X" document then a short reasoning is given.
For example:
 2. The subject-matter of claims 1 and 10 is also not new in view of D2.

D2 discloses (see figure 1) an LED array (12) and a movement detector (14) whereby when the signal from the movement detector exceeds a threshold the LEDs are switched on (see paragraphs [0035]-[0038])

- This reasoning may only pick out the features that the examiner sees as being particularly relevant.

Box V - Example of Inventive Step

- 1 The subject-matter of claim 1 does not involve an inventive step, Article 33(3) PCT, in view of D1 and D2.
 - 1.1 D1 discloses:
 - aaa
 - bbb
 - ccc
 - 1.2 The subject-matter of claim 1 differs from D1 in the feature ddd
 - 1.3 The problem to be solved in D1 is to ensure that colour control of a discharge lamp can be achieved
 - 1.4 D2 teaches that the feature ddd can be used to control the colour of a lamp
 - 1.5 Therefore, it would be obvious for the skilled person to combine the features of D1 with D2 and arrive at the subject-matter of claim
 - 1.6 Hence the subject-matter of claim 1 is not inventive.

Box V - Inventive step

- Further arguments?
- The grounds and the basis are given but the argumentation is normally short. For example.
 2. The subject-matter of the independent claims does not involve an inventive step, Art 33(3) PCT in view of D2 and the knowledge of the skilled person.

Starting from D2, the skilled person could also adapt the colour control to the field of other types of well known lamps.

Box V : Further information

The dependent claims are addressed:

3. Dependent claims 2-7, 9 and 11-15 do not appear to contain any additional features which, in combination with the independent claims meet the requirements of the PCT with respect to novelty and/or inventive step, the reasons being as follows:
 - 3.1 Claims 2-4 and 11 are known from D1 (see in particular fig. 4)
 - 3.2 Claims 5-7, 9 and 12-15 relate to obvious alternative constructions to the teaching of D1.

MAYBE the examiner writes:

- 3.3 There are no objections concerning claim 8 with respect to novelty and inventive step because the feature xxx is not disclosed in D1 and this solves the problem of yyy.

Box V - clarity

- The claims are unclear such that the assessment of novelty / Inventive step is affected.
- There are two approaches:
 - 1) The examiner writes the clarity objection and indicates the reasons for affecting novelty / Inventive step in Box Vor
 - 2) The examiner makes reference to objections raised in Box VIII

Box VII - Certain defects

- Note: This section is often left out by EPO examiners as they prefer to deal with these objections in the regional phase
- Example

Re Item VII

Certain defects in the international application

1. Independent claims 1 and 10 are not in the two-part form, contrary to Rule 6.3(b) PCT. It appears that the two-part form would be appropriate in the present case, with those features known in combination from the prior art D1 being placed in the preamble (Rule 6.3(b)(i) PCT) and the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
2. The features of claims 1-18 are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
3. Rule 5.1(a)(ii) PCT requires that the relevant background art disclosed in D1 and D2 be mentioned in the description and that these documents be identified therein.

Box VIII - Certain observations (clarity)

- Clarity problems
 - claims, description, drawings
- Claims are insufficiently supported by the description
- If clarity objections were raised in Box V they are not repeated.

Box VIII - Clarity examples

- Too many independent claims in one category (conciseness)
 1. Although claims 1, 19 and 22 have been drafted as separate independent apparatus claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and/or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
- Result to be achieved
 - stating the problem, not the features associated with the solution
- Inconsistencies
 - naming of parameters,

Positive Written Opinions

- This is done when there are no objections relating to novelty, inventive step or clarity
 - minor clarity such as a lack to reference signs will not give rise to a negative opinion.

How does this look like?

Example of a positive opinion

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1 : US7,133,898 A2

1. D1 is regarded as being the prior art closest to the subject-matter of claim 1, and discloses:
AAA
BBB
CCC
- 1.1 The subject-matter of claim 1 differs from D1 in that of feature DDD and is therefore new (Article 33(2) PCT).
- 1.2 The problem to be solved by the present invention may be regarded as XXX
- 1.3 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: YYY

No objections for Patentability

- The examiner may give a negative opinion but indicate that there appears to be no objections with respect to novelty and inventive step
 - In this case it is likely that the clarity objections are such that a direct grant on entering the regional phase with the European patent office would not be possible.

How to use the IPER

- The PCT application enters National / Regional phase
 - Follow the direction of the written opinion (IPER / IPRP)

- Family member of a filing in another office
 - During the search phase:
 - Look in databases for that office and see if there are published opinions

 - During the examination phase (**WO-ISA only public after 30 months**):
 - Even after the first communication, check the opinions
 - Maybe you have not spotted a problem with clarity...
 - Maybe you have overlooked a novelty embodiment...

Finally

- Following the search the examiner writes an WO-ISA which is converted for publication to either an IPER or an IPRP.
- The WO-ISA with a standard search relates to about 3 pages of indications relating to boxes I to VIII,
and
a separate sheet with reasoning corresponding to the applicable boxes.
- The WO-ISA is aimed at aiding the next phase in either the regional offices or the national offices.
 - The examiner should indicate all the major objections.

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
 INTERNATIONAL SEARCHING AUTHORITY
 (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/IB2009/055889	International filing date (day/month/year) 21.12.2009	Priority date (day/month/year) 31.12.2008
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International Patent Classification (IPC) or both national classification and IPC
INV. H05B41/282 H05B41/285 H03K17/16

Applicant
NXP B.V.

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
 D-80298 Munich
 Tel. +49 89 2399 - 0
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Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2009/055889

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - the international application in the language in which it was filed
 - a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
 - a. (means)
 - on paper
 - in electronic form
 - b. (time)
 - in the international application as filed
 - together with the international application in electronic form
 - subsequently to this Authority for the purposes of search
4. In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	<u>2-5, 7-8, 10-12</u>
	No: Claims	<u>1, 6, 9, 13-14</u>
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-14</u>
Industrial applicability (IA)	Yes: Claims	<u>1-14</u>
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2009/055889

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1 US 7 259 523 B2

- 1 The subject-matter of independent claim 1 does not meet the requirements of Article 33(2) PCT.

D1 discloses:

A method of controlling a controller for a lamp (see abstract), the controller having an inductor (figure 1, inductor L_1) connectable in series between the lamp and a half-bridge node (node V_{hb}) which half-bridge node is between a first switch (T1) and a second switch (T2),

the method comprising:

alternately closing the first and second switches for respective first and second periods and with a soft-switching interval therebetween (column 4, line 46 onwards);

controlling at least one of the first and second periods by means of a comparison between a signal derived from an output of a saw-tooth generator and a first predetermined reference signal (figure 4A shows Cmp_1 , which compares the saw-tooth waveform with the reference V_{REF1});

and during the first period:

comparing (amplifier G_m which is working as a comparator as voltages below the reference voltage have no output) an indicator signal indicative of current in the inductor (voltage across R_{sh}) with a second predetermined reference signal (V_{REF3}) and

increasing a slope of the output of the saw-tooth generator to a steeper slope in response to the indicator signal being greater than the second predetermined reference signal and thereafter maintaining the steeper slope until the first switch is opened or the sawtooth generator is reset (see column 9, line 12 onwards and figure 6; Once the voltage across R_{sh} is above the value of V_{REF3} , the charge rate of capacitor C_2 increases, i.e. from the charge rate based on current source CS to one based on the output of the amplifier G_m).

Hence the subject-matter of claim 1 is not new.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2009/055889

- 2 Dependent claims 2-14 do not appear to contain any additional features which, in combination with the independent claims meet the requirements of the PCT with respect to novelty and/or inventive step.

Claims 6, 9 and 13 contain features which are disclosed in D1.

The remaining dependent claims relate to usual matters of design which are unable to lend inventive step to the independent claims, Article 33 PCT.

Re Item VIII

Reasoned statement with regard to clarity

- 1 The application does not meet the requirements of Article 6 PCT, because claim 14 is not clear.

Claim 14 references "a controller as claimed in claim 9". However, claim 9 defines a method and not a controller.

Thank you very much for your time.

Any Questions?

Ian Morrish
Examiner

February 2013

