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HMRC internal manual

Corporate Intangibles Research and Development Manual

From: [HM Revenue & Customs](#)
([/government/organisations/hm-revenue-customs](#))

Published 11 March 2016

Updated: 10 September 2025 - [See all updates](#)

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CIRD275000 - Patent Box : Calculation Flowchart

The Patent Box calculation flowchart is designed to help you work through the steps required to identify whether your company is able to use the 'Patent Box' tax incentive when commercialising patents and other qualifying intellectual property. It can be found in the link to [Calculation flowchart \(Pdf\)](#)

(http://www.hmrc.gov.uk/gds/cird/attachments/CIRD275000_Patent_Box_Decision_Chart.pdf) . If you are unable to access the attachment, an accessible version is set out below: You will need to refer to

the guidance links to obtain further details as you work through the Patent Box calculation, but this flowchart indicates which sections are relevant to you.

Part 1: Entry Criteria – check eligibility

1. Are you a company? Yes go to 2, no END.

2. Do you hold a qualifying IP right (or rights) by way of ownership or exclusive licence

([CIRD210100](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird210100>), [CIRD210110](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird210110>)) or cost share arrangement ([CIRD276000](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird276000>)), and meet the development conditions ([CIRD210200](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird210200>)) and if in a group meet the Active Ownership criteria ([CIRD210210](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird210210>))

Yes go to 4 no go to 3

3. Do you have patents pending which will become qualifying IP rights once granted ([CIRD220540](#)

(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220540>))?

Yes go to 4 no END

4. If you wish to elect into the Patent Box, make an election (within the tax computation) and once the patents are granted follow the following steps to apply a reduced rate of corporation tax on profits relating to exploiting qualifying IP rights

Yes go to 5, no END.

Part 2: Preparation

5. Track and trace R&D and acquisition expenditure underlying the qualifying IP rights from 1/7/16 (unless you wish to make election for earlier) per [CIRD272000](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird272000) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird272000>). See [CIRD240160](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird240160) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird240160>) if IP acquired as part of a Transfer of a trade, as special rules apply. Acquisition costs includes licence fees for the right to exploit qualifying IP rights.

You will need this information for the calculation.

Go to 6

- Global stream (only applicable for companies with smaller profits)

6. Does the company meet the criteria for Small Claims Treatment ([CIRD220470](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220470) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220470>)) and want to elect into the Small Claims Treatment election for having one global stream of relevant IP income (RIPI)? ([CIRD273200](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird273200) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird273200>))? Yes go to 7 , no go to 8.

7. Make election for Global streaming within the tax computation if you meet the criteria to use a Global stream ([CIRD273200](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird273200) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird273200>)). Split income into a stream of 'no qualifying IP income' (NON RIPI) and global stream of relevant IP income (RIPI). Go to 8.

- Notional Royalties (only applicable when income is from process patents, services or leasing)

8. Is income from any of the qualifying IP rights 'IP derived income'? ([CIRD220250](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220250>)) This might be from process patents, leasing, or service income for example.

Yes go to 9, no go to 12.

9. Follow the rules at [CIRD220250](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220250>) to ascertain 'IP derived income' relating to the Qualifying IP rights in 8. Does the company meet the criteria for Small Claims Treatment ([CIRD220470](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220470>))?

Yes go to 10, no go to 11.

10. Make a small claims election (within the tax computation) for notional royalties if you want to take the 'appropriate percentage' of 'IP derived income' to be 75% ([CIRD273100](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird273100>)) and include the notional royalty within the global stream if that Small Claims Treatment election has also been made. Go to 12.

11. Complete the notional royalty calculation by calculating an 'appropriate percentage' of 'derived IP income' following the rules in [CIRD220251](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220251>) and [CIRD220252](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220252>) using transfer pricing principles. Put this deemed income into its own sub-stream. Go to 12.

- Stream income and expenditure

Relevant IP Income is worldwide income from 5 different Heads of Income ([CIRD220160](#)

(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220160>) if included within the Patent Box company's Accounts.

12. Can you identify income relating to every individual qualifying IP right and track its related R&D expenditure? The criteria is that you should use the most detailed level. [CIRD271500](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird271500) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird271500>) provides guidance.

Yes go to 13. No go to 14.

13. (All sub stream(s) at IP level).

Split income and expenditure into streams of NON RIPI (if no income from qualifying IP rights), and RIPI (relevant IP income), the latter being divided into sub-stream(s) for each qualifying IP right. Place relevant expenditure into each stream on a just and reasonable basis. [CIRD271500](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird271500) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird271500>) provides guidance. Track and trace R&D expenditure and acquisition costs at this level per [CIRD272000](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird272000) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird272000>). Go to 15.

14. (Sub-stream(s) at product/process or product/process family level).

Split income into streams of Non RIPI (if no income from qualifying IP rights) and RIPI (relevant IP income), the latter being divided into sub streams at an appropriate product or product family level, separating 'mixed sources of income' on a just and reasonable basis ([CIRD220290](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220290) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220290>)). The qualifying IP rights grouped together need to be capable of being used for the same or substantially the same purpose. Place relevant expenditure into each stream on a just and reasonable basis. Go to 15

- Sub stream adjustments

15. Are there any qualifying IP rights within the sub streams for which income related acquisition payments are required (eg payments of milestones or stage payments based on a certain income being achieved ([CIRD274500](https://www.gov.uk/hmrc-internal-manuals/cird274500) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274500>)))?)

Yes go to 16, no go to 17.

16. Remove the income related acquisition payments from expenditure in that sub stream for Patent Box purposes (not from the Accounts).

Go to 17.

17. Ensure that excluded income ([CIRD220280](https://www.gov.uk/hmrc-internal-manuals/cird220280) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220280>)) and non qualifying expenditure (eg Finance Income, RDEC ([CIRD220130](https://www.gov.uk/hmrc-internal-manuals/cird220130) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220130>))) is excluded from RIPI sub streams.

Go to 18.

18. Deduct the expenditure debits from the income in each stream/sub stream to determine relevant IP profits (or loss). Go to 19.

- Routine Return calculation

This step is to exclude the proportion of profits approximating to 'routine' construction or work in creating the product or process from the Patent Box as they do not attract the preferential rate of corporation tax.

19. A Routine deduction is expenditure specified in [CIRD220440](https://www.gov.uk/hmrc-internal-manuals/cird220440) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220440>) with examples at

[CIRD220460 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220460\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220460)

The routine return is a fixed 10% of that expenditure

Calculate the routine return deduction for each stream /sub stream with relevant IP income and deduct it from those streams or sub streams.

([CIRD220430 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220430\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220430))).

Go to 20

- Marketing Asset Return calculation

This step is to exclude profits relating to marketing or brands as they do not attract the preferential rate of corporation tax. It only applies if these profits are greater than 10% of the qualifying relevant IP profits in each stream/substream (step 19).

20. Does the company meet the criteria for Small Claims Treatment ([CIRD220470 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220470\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220470))?

Yes go to 21 no go to 22.

21. If you want to make a small claims election for a Marketing Asset Return deduction of 25% of relevant profits (after step 19) ([CIRD220480 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220480\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220480)), make the small claims treatment election (within the tax calculation) and deduct the Marketing Asset Return of 25% from each sub stream. Go to 23.

22. Follow the rules in [CIRD220490 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220490\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220490) – [CIRD220530](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220530)

(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220530>) to calculate a relevant Marketing Asset Return:

- Calculate a notional marketing royalty where applicable using transfer pricing methodology for each RIPI sub stream. (NMR)
- Reduce this by any actual marketing royalty paid (AMR) to arrive at the Marketing Asset Return amount
- Deduct the relevant amounts from the relevant stream/sub stream profits (losses)

Go to 23

- R&D Fraction Calculation

This step is to restrict Patent Box profits to the company's involvement in underlying R&D

23. Use the tracking and tracing records to identify:

Direct R&D expenditure (D), unconnected party subcontracted R&D expenditure (S1), connected party subcontracted expenditure (S2) and acquisition expenditure (A) for each RIPI stream/sub-stream.

Calculate fractions using the formula $(D+S1) \times 1.3 / (D+S1+A+S2)$, capped at 1, for each RIPI stream/sub-stream.

Does the result provide an exceptionally incongruous result? Yes go to 24, no go to 25.

24. Consider whether it is appropriate to make an election to use an alternative Value Fraction because of exceptional circumstances instead of the R&D fraction per [CIRD275500](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird275500) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird275500>) Go to 25.

25. Multiply the relevant fraction by the relevant profits in each RIPI stream/sub stream to create relevant IP profits/losses for each sub stream. Go to 26.

Part 4 Patent Box deduction – how to receive the relief

26. Add the sub stream relevant IP profits/losses from each stream/sub-stream together.

Calculate and add the relevant profit/loss for the patent pending period for any patents granted within the accounting period ([CIRD220550](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220550) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220550>)).

Create a total Patent Box Relevant Profit (or loss). If loss go to 27, if profit go to 28.

1. A Patent Box loss falls within the main CT computation but the amount should be identified. Reduce any related company's Patent Box profit or carry forward to reduce any future Patent Box profit by this amount END.

28. The relevant IP profits are taxed at the preferential rate of corporation tax (10%) and other (NON RIPI) profits charged at the company's applicable rate (main rate or small profits rate) of corporation tax.

In order to apply this through the corporation tax return, there is a formula designed to blend these rates and allow one profit figure to be entered onto the CT return CT600. ([CIRD201020](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird201020) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird201020>))

Multiply the Relevant Profit by $(AR - IPR)/AR$ where AR = main rate of CT or if applicable the small profits rate and IPR = special rate of Patent Box CT (10%). This is the Patent Box deduction which should reduce the profits in the CT600. The

tax charged will equate to the same amount as the split calculation.

END: RELIEF GIVEN

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