

Beta This part of GOV.UK is being rebuilt – [find out what beta means \(/help/beta\)](#)

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](#)

[Back to contents](#) > [CIRD200000](#) > [CIRD270000](#)

CIRD275200 - Patent Box: streaming calculation steps continued CTA10/s357BF as modified by s357BQ

S357BF, as modified by s357BQ

Streaming step 1 (set up streams)

All amounts brought in as taxable credits of the trade in the accounting period (excluding RDEC credit and any finance income ([CIRD220130](#) <https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development->

[manual/cird220130](#))), are divided into two 'streams' of income. This is done by identifying how much is relevant IP income ([CIRD220150](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220150>)) (this will include any notional royalty allowed by S357BHA ([CIRD220250](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220250>))) and how much is not relevant IP income. The two streams are the 'standard income stream' and 'relevant IP income stream' and should total the company turnover excluding excluded income and finance income.

Any amount which is not relevant IP income is not part of the Patent Box and expenses relating to this income should be set against that stream for completeness.

If a company qualified for Small Claims Treatment ([CIRD273200](#)) and has elected for global streaming to apply, then omit step 2.

Streaming step 2 (allocate income to sub-streams)

The company will need to have considered the points made in [CIRD271500](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird271500>) relating to streaming income and [CIRD272000](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird272000>) regarding how to track and trace related R&D and acquisition expenditure to ascertain what is 'reasonably practicable' for its own requirements before attempting to follow the calculations described below.

Divide the relevant IP income stream into relevant income sub-streams. Sub-streams should be separated into as many sub-streams as are needed which should each consist of relevant IP income arising from either a particular qualifying IP right, or if this is not reasonably practicable,

income proper to a particular kind of IP (known as product or product family sub-streams).

If using a product or product family sub-stream method, any notional royalty arising from derived IP income calculated under s357BHA (such as from a process patent for example) should be in a separate sub-stream from other relevant IP income arising from Heads of Income within s357BH (for example sales, licence royalties, compensation, infringement rights or disposals) unless both relate to a particular kind of IP, which means that they are intended to be, or are capable of being, used for the same or substantially the same purposes.

A product or process sub-stream can include a particular kind of IP item or IP process which are intended to be or capable of being used for the same or substantially the same purpose. They can incorporate one or more items or processes

It can be considered that it is not reasonably practicable to stream by IP asset if it is not possible to identify or reasonably allocate income from that IP asset between separate streams, or if the R&D expenditure cannot be divided between the different streams.

Example:

A company has Product A with patents 1,2 and 3 and Product B with patents 1 and 4.

The company must consider whether it can stream at qualifying IP right level, which would be streams allocating income, and R&D and acquisition expenditure to an R&D Fraction for each of 1,2,3 and 4. Any continued R&D or acquisition expenditure for each patent would be restricted to that stream. If the company is able to stream at this level then it must do so.

If it is not 'reasonably practicable' to reach a just and reasonable apportionment of either income or R&D expenditure between these streams, the company may use product streaming. In this case

there would be 2 income streams, A and B. The R&D expenditure and any acquisition expenditure for patents 1, 2 and 3 would all combine into the R&D Fraction for sub stream A and the R&D expenditure and any acquisition expenditure for patents 1 and 4 would combine into the R&D Fraction for sub stream B. The entire R&D and acquisition expenditure for patent 1 would feature in each sub stream, not split between the sub streams, to obtain the correct proportion within the R&D Fraction.

There will be different considerations depending on the type of qualifying IP right and the way that they are used in different sectors. HMRC does not intend to be prescriptive on this in order to allow companies to operate the Patent Box in the most effective way possible, as long as they have regard to the OECD requirement to stream at the lowest level if possible.

Streaming step 3 (allocate deductions to sub-streams)

Debits deducted in arriving at taxable trading profit, excluding any loan relationship debits, derivative contract debits and any additional R&D tax deduction, are then allocated against the stream to which they relate on a just and reasonable basis.

To be 'just and reasonable', a method of allocation must normally be consistent between one year and the next, unless there is a change of circumstances that make the method inappropriate.

Clearly what is just and reasonable will depend on the specific circumstances. However, all debits must be allocated. The aim is that debits that arise in generating the relevant IP income are allocated against the relevant IP income stream and debits that arise in generating the non-relevant IP income stream are allocated against the non-relevant IP income stream.

Streaming step 4 (make deductions including routine return deduction for each sub-stream)

This step requires the company to deduct the debits from step 3 allocated against the relevant IP income streams and sub streams from those income streams and sub streams.

There is one exception to this. A deduction should not be made in respect of an 'income related payment' if the payment is included as an acquisition cost in the R&D fraction for the sub stream as described in [CIRD274500](https://www.gov.uk/hmrc-internal-manuals/cird274500) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274500>). An income related payment is one where there is an obligation to make a payment by reason of an amount of income which is properly attributable to the right or licence, or determined by reference to the amount of income the company has accrued which is so attributable. (s357BIA) For example, this would include licence fees which are related to the percentage of sales containing the relevant qualifying IP right which are adversely reducing the R&D fraction in proportion to their success.

The company should then calculate the routine return figure for each substream (s357BJ [CIRD220440](https://www.gov.uk/hmrc-internal-manuals/cird220440) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220440>)) by applying the routine return percentage (10%) to any routine deductions included in the debits allocated against each relevant IP income sub stream. 'Routine deductions' are covered at [CIRD220440](https://www.gov.uk/hmrc-internal-manuals/cird220440) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220440>) and [CIRD220450](https://www.gov.uk/hmrc-internal-manuals/cird220450) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220450>).

Deduct the amount of routine return from each sub stream to arrive at a Qualifying Residual profit (QRP).

Streaming step 5 (marketing assets return deduction)

Consider whether a Marketing Asset Return deduction should apply using [CIRD220490](https://www.gov.uk/hmrc-internal-manuals/cird220490) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220490>)

If the company qualifies for Small Claims Treatment and has made an election for the small claims amount to apply, deduct 25% of the QRP at the end of step 4.

Deduct from each relevant IP sub stream which is greater than nil the appropriate marketing assets return for that sub stream. (s357BK [CIRD220490](https://www.gov.uk/hmrc-internal-manuals/cird220490) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220490>))

The resultant profit is the Relevant IP profit for each sub stream.

Streaming steps 6 (applying the R&D fraction)

Calculate the R&D Fraction for each sub stream as per [CIRD274000](https://www.gov.uk/hmrc-internal-manuals/cird274000) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274000>) and the example in step 2 above.

The R&D Fraction is cumulative and will change depending on R&D expenditure and acquisition costs each year.

Multiply the Relevant IP profit by the R&D fraction for each sub stream.

Add together the relevant IP profit for each sub stream.

Streaming step 7 (include any patent pending periods)

If the company has made an election relating to profits arising before the grant of a right, and that

right has now been granted, add to the amount given in step 6 any amount determined in accordance with those calculations at [CIRD220540 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220540\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird220540).

Have regard to whether or not an R&D Fraction applies if the application was made before 1 July 2016.

It is possible that the company will need to change its previous years' streaming methodology as a result of the grant of the qualifying IP right. This should be made as an overall adjustment in the computation in the year of grant rather than making amendments to previous years' calculations.

Streaming step 8 (Patent Box deduction)

The resultant profit is the relevant IP profits of the trade. If the figure is less than nil it is the resultant IP loss of the trade.

The relevant IP profit is then fed into the equation as described in [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) to create the deduction to be used in the computation, which results in the Patent Box reduction to the corporation tax due.

The treatment of the loss is described in [CIRD240100 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird240100\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird240100).

← Previous page

(/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird275100)

→ Next page

(/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird275300)



OGL

All content is available under the Open Government
Licence v3.0, except where otherwise stated



© Crown copyright