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Corporate Intangibles Research and Development Manual

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CIRD274200 - Patent Box : The terms of the R&D fraction CTA10/s357BLA - BLE S357BLA –BLE CTA10

The R&D fraction is calculated as the lower of 1 and:

$$\frac{(D + S1) \times 1.3}{D + S1 + S2 + A}$$

Where,

- **D** is direct expenditure on relevant R&D described in [CIRD274300](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274300)
(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274300>)
- **S1** is the company's qualifying expenditure on relevant R&D sub-contracted to unconnected persons – that is the amount incurred by the company for R&D purposes in the relevant period in respect of unconnected subcontractor payments described in [CIRD274400](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274400)
(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274400>)
- **S2** is the company's qualifying expenditure on relevant R&D sub-contracted to connected persons – that is the amount incurred by the company for R&D purposes in the relevant period in respect of connected subcontractor payments described in [CIRD274400](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274400)
(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274400>)
- **A** is the company's qualifying expenditure on the acquisition of relevant qualifying IP rights – that is the cost of acquiring the qualifying IP right or an exclusive licence in the relevant period in respect of the qualifying IP right described in [CIRD274500](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274500)
(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird274500>)

Note: the definitions of the R&D expenditure aligns with the R&D guidance at [CIRD82100](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82100)
(<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82100>) (except for with regards to overseas expenditure provisions and contracted out expenditure - see below for details) but their use and restrictions within an R&D tax credit or RDEC computation may differ from the Patent Box computation. For example, Patent Box legislation requires the expenditure to have been incurred, not necessarily paid. Please note it is not

necessary for the R&D expenditure to have been included in an R&D Tax Credit and/or RDEC claim for R&D expenditure to be included in the R&D Fraction for a Patent Box election.

Patent Box has not followed the rule changes to Overseas Expenditure Provisions and Contracted Out Expenditure that have effect to the R&D Tax Relief Schemes from 1 April 2024. For Patent Box purposes the pre-April 1 2024 rules continue to apply

Within each accounting period:

Add to each term of the fraction from the previous year or commencement of the new regime any relevant R&D or acquisition expenditure which has been incurred in the accounting period. The expenditure must have been incurred in that accounting period that falls, in whole or in part, within the relevant period.

It should be noted that the relevant period will often, but not always be the same as the accounting period. In an accounting period straddling 30 June 2016, CTA10/S63(9) requires there to be a notional split into two periods so the part of the period prior to 1 July 2016 (i.e. before the new regime started) does not get included, and a similar notional split will be required in an accounting period straddling 30 June 2021, where there is still an old regime stream to be moved to the new regime .

For the terms D, S1 and S2 of the R&D fraction, ‘relevant R&D’ means R&D within the meaning of CTA2010/s1138 ([CIRD82100](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82100) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird82100>)) which relate to the Qualifying IP right as follows:

- For an individual IP right sub-stream, the R&D must relate to the qualifying IP right
- For a product or product family sub-stream, the R&D must relate to a qualifying IP right in respect of any item to which income in the sub

stream is attributable, or an item incorporated in such an item

- For a process sub-stream, the R&D must relate to a qualifying IP right in respect of a process to which income in the sub stream is attributable, or a process incorporated in such a process

and the R&D 'relates' to a qualifying IP right in a broad range of contexts, namely:

- Creates, or contributes to the creation of the invention
- Undertaken for the purpose of developing the invention
- Undertaken for the purpose of developing ways in which the invention may be used or applied
- Undertaken for the purpose of developing any item or process incorporating the invention

Note that

The R&D expenditure on a qualifying IP asset which has been conferred by an exclusive licence may contribute to the R&D fraction for the sub-stream including relevant IP income from that exclusive licence because it is in respect of the underlying qualifying IP right(s).

Categories of R&D expenditure are as for the R&D tax credit legislation at SS1123 – 1140 CTA2009.

Expenditure on payments to Qualifying Bodies are excluded as this will be included as part of the subcontractor expenditure (either connected or unconnected, depending on the facts.)

R&D may relate to more than one sub-stream

Example at product level where one R&D team contributes expenditure which relates to several products:

If R&D expenditure relates to more than one stream and it is not appropriate to split it between streams, the entire amount may be applied to

each stream. This is so as not to 'dilute' the effect of that expenditure's contribution to the different R&D fractions. The intention is to ensure that the fraction for each stream reflects the correct proportion of the different types of R&D within that stream.

Expenditure incurred in one in house R&D laboratory of £1000 which is incorporated into products A, B C which are streamed separately. Product B contains a different IP right as well, incurring further R&D connected party costs of £500 and product C includes another qualifying IP right with an acquisition cost of £5000.

The fractions will be

A: $1000 \times 1.3/1000$

B: $1000 \times 1.3/1500$

C: $1000 \times 1.3/6000$

If the in-house IP expenditure were spread between the streams the numerator (and fraction) would be reduced and if applied to further product streams it would be reduced further. The fraction is not intended to discourage companies from incorporating IP into additional products so the full cost of the expenditure should be applied to each stream to which that in house R&D contributed.

The same principle must apply to all the terms of the fraction to keep the same proportions, so connected party R&D expenditure contributing to several products should similarly be included in all the product streams, reflecting the connected party contribution to each.

Blue Sky research

It is recognised that there will be occasions when it is difficult to trace certain R&D directly to IP assets e.g. when a company undertakes Blue Sky research, which may or may not lead to development of a product or process, and where such research could legitimately be said to be

relevant to the creation of a number of qualifying IP rights.

As in the example above, the expenditure for Blue Sky research may feature in more than one stream to reflect the inherent value across any stream which has benefitted from it.

Summary

It is important to understand that in calculating the R&D fraction for a sub-stream, it is not a conventional tax calculation where some fixed amount of income or expenditure must be apportioned, as with the apportionment of credits or debits between the sub-streams. The R&D fraction for a sub-stream must include all the R&D expenditure that relates to that sub-stream.

It follows that

- there may be some R&D expenditure that relates to no current sub-stream; and/ or,
- there may be some R&D expenditure that relates to more than one sub-stream such that the whole amount can be correctly attributed to each of the sub-streams.

The first alternative might occur in cases where, to date, a particular line of research proved fruitless to all the company's income-earning products and processes. Of course it is always possible that the research will earn income in the future so companies should ensure that they do track such expenditure. It is also possible that research that has no direct or immediate benefit may still be relevant to other products: this is a matter of judgement. For example, a life science company develops a platform technology that ultimately fails but the qualifying IP rights are transferred to a successful project. R&D expenditure should be reallocated where a successful project adopts the patents.

The second alternative could occur where, for example, a single technology underpins several different product lines, with different, additional

R&D in each case. For example, a company incurs R&D expenditure which is used in the development of a number of patented products. The same R&D expenditure can therefore be included in the R&D fractions for a number of different IP income streams.

Alternatively, a company incurs R&D expenditure was ultimately proved irrelevant to the development of its qualifying IP right. The expenditure does not have to be included in the R&D fraction relevant to that right.

The legislation recognises that there will be many scenarios with different qualifying IP rights so the treatment will depend on the facts of each situation. There is no one correct answer, but if any substantial change is made to the methodology the reasons should be included within the computation.

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