TC02491

Appeal numbers: TC/2010/00411 & TC/2010/09293

Capital allowances – research and development allowances for expenditure on vaccine research and development – claim by partners of limited partnership – whether arrangements a sham – whether partnership trading – whether partners entitled to loan interest

FIRST-TIER TRIBUNAL
TAX CHAMBER

THE PARTNERS OF THE VACCINE RESEARCH LTD PARTNERSHIP and LIONEL PATRICK VAUGHAN — **Appellants**

- and -

THE COMMISSIONERS FOR HER MAJESTY'S REVENUE & CUSTOMS — **Respondents**

TRIBUNAL: JUDGE DAVID WILLIAMS
MS S O'NEILL

Sitting in public at Field House, London on 2, 3, 4, 5, and 6 July 2012

Jonathan Peacock QC and Joylon Maughan of counsel, instructed by Berwin Leighton Paisner LLP for the Appellants

Kevin Prosser QC, David Yates and Zizhen Yang of counsel instructed by the General Counsel and Solicitor to HM Revenue and Customs, for the Respondents

DECISION

1 The central issue in these appeals is whether the Appellants, the partners of the Vaccine Research Limited Partnership (The Partnership), are entitled to loss relief in respect of research and development capital allowances incurred in the 2006-2007 income tax year. The total claimed for the Appellants is about £193 million. The Respondents (HMRC) accept that there was expenditure of £14 million on relevant research and development but did not accept that the claim could be made by The Partnership. We also considered whether it might be some sum in between those contentions.

2 Formally, we had two appeals before us: one in the name of The Partnership and the other in the name of one of the limited partners (a Class B Limited Partner). It was agreed and directed that the two appeals be heard together although some of the issues raised for Mr Vaughan do not apply to The Partnership as whole. It was put to the tribunal at the hearing that he was a representative partner. No separate evidence or submissions were offered by or for the individual partner, who was represented before us by the same counsel as The Partnership, save on the issues relevant only to him. Nor was any point taken by either party about procedural aspects of these appeals. However, for income tax purposes a limited partnership is transparent. As the Income Tax (Trading and Other Income) Act 2005, section 848, puts it pithily:

> "Unless otherwise indicated (whether expressly or by implication), a firm is not to be regarded for income tax purposes as an entity separate from and distinct from the partners."

3 It is therefore necessary to look through The Partnership to each of the individual partners with regard to all aspects of this appeal save where the contrary is indicated. That in effect makes this an appeal by or for each of the partners rather than by The Partnership. But it is convenient to deal with the partners as a whole for some aspects of the case. Save where specifically noted below, this decision therefore deals with the appeal by the individual partner as part of parallel appeals by each of the partners, referred to jointly as The Partnership. Save again where specifically noted, all references in this decision to "the appeal" are to be read in this way. However, to avoid any doubt, the individual partners are listed in an annex to this decision.

4 The background to this appeal is that a third party agreed, as a sub-contractor to a contractor to The Partnership, to undertake scientific research into the identification and preparation of certain vaccines as part of a scheme involving The Partnership starting in the year 2006-2007. This was the subject of a complex financing structure. The following is a summary of that structure, to which we refer as the Scheme in this decision.

The Scheme

5 A biotechnology company named PepTcell Ltd – now trading under the name of SEEK – wished to secure working capital to finance research, development and application costs in respect of proposed research into the identification and

development of vaccines. This is a high-risk investment. The founder of the company, Greg Stoloff, drew on his own previous experience of finance to secure the capital his company needed by arranging a funding scheme that reduced the level of risk to investors.

6 For this purpose he opened discussions with the Matrix-Security group of companies (Matrix). As the plans evolved the Jersey Trust Company also became involved, as did the Bank of Scotland (BOS) and the Royal Bank of Scotland (RBS). Those plans were shown to potential investors by Matrix with the issue of an information memorandum called the Vaccine Research Limited Partnership (the Memorandum) on 16 June 2006.

7 The Memorandum illustrated the intended structure of the Scheme using as an example an individual who invested £1 million in the arrangement. It explained that anyone investing in this way would become a Class B Limited Partner in the Vaccine Research Limited Partnership. This would carry out research and development of a number of vaccines through an agreement with an R&D contractor. (The R&D Contractor was later named as Numology Ltd.) The R&D Contractor would enter into a sub-contract with PepTcell Ltd (the Research Sub-Contract), so linking that company to the Scheme. The example is as follows, and is intended to describe the position of each Class B Limited Partner. The Class B Limited Partner is assumed to invest £800K by way of borrowed funds and a further £270K of own funds, totalling £1million invested and £70K in fees. The Class B Limited Partner would have access to £800K by way of a 15 year amortising loan repayable with interest to the lender, identified in the Memorandum only as Lending Bank. The Partnership would agree a £1.8 million contract with an R&D Contractor in respect of that investment. The R&D Contractor is identified as the Class A Limited Partner. That partner is identified in the example as investing £800K into The Partnership.

8 In other words, The Partnership would invest £1.8 million in the R&D Contractor while at the same time the R&D Contractor would invest £0.8 million in The Partnership. Also at the same time The Partnership would pay £70K fees to Matrix for that investment by the Class B Limited Partner (the fee being payable at the rate of not more than 7 per cent of the capital raised). The minimum investment to be raised was £50 million. In the event, the capital subscribed to The Partnership by the Class B Limited Partners was just over £114 million.

9 The effect was that the investment of £800K in funds borrowed from the Lending Bank by the Class B Limited Partner into The Partnership would be used to pay the R&D Contractor. This would be matched exactly by an investment of £800K by the R&D Contractor in The Partnership. Of the additional £270K to be invested by the Class B Limited Partner in the example, £200K would go to the R&D Contractor while £70K was for costs and fees payable to Matrix.

10 The Memorandum identifies the general partner of The Partnership as being MRD Ltd, a company registered in Jersey. It identifies Matrix Structured Finance as the body to provide support, administrative services and facilities to MRD Ltd and the

Partnership. It identifies PepTcell Ltd as being a company collaborating by way of a sub-contract with the R&D Contractor. It gives an indicative total sum to be raised of £153,370,616 which, after deduction of £8 million for fees and other costs, would be £145,370,616 as the cost of the research and development. This is stated to be contributed as to £85,205,898 by the Class B Limited Partners and as to the balance of £68,164,718 by the Class A Limited Partner .

11 The Memorandum separately discusses the resulting cash flow to a Class B Limited Partner who is assumed to have invested £1.07M (that is, £1M in the research and development plus his share of the fees). It states that loans are available from an unidentified source as a full recourse interest-bearing loan with amortisation over 15 years. It further states that as a result of collaboration with the R&D Contractor it is able to offer a financial return which combines guaranteed minimum licence fees with a 10 per cent share of net revenues from the vaccines. The licence fees are payable for a minimum of 15 years and are to be guaranteed by way of a letter of credit from an approved bank. A table shows how payment of licence fees to the partner at a stated level of £80,000 a year will meet the costs of repaying the capital of the loan with interest over the 15 year period. So the Class B Limited Partner takes out a loan under the Scheme for £800K and relies on the guaranteed minimum licence fee to repay that loan off in entirety and exactly, with interest, over the 15 year period.

12 The Memorandum explains that the intellectual property in any successful vaccines will be the property of The Partnership. The intention is stated to be that The Partnership will enter into a licence agreement with the R&D Contractor. This gives the R&D Contractor the advantage of acquiring any property rights held or to be held by the Partners. In return the consideration given consists of the guaranteed minimum licence fees over the 15 year period plus a share of any revenues from vaccines.

13 The tax position as understood by Matrix is summarised as follows (at page 23 of the Memorandum):

> "It is anticipated that the research and development expenditure will be incurred in the first accounting period of the partnership, such that each Class B partner will be entitled to a pro rata shares of the losses arising in the first accounting period. Such losses should represent trading deductions allowable to the partnership in respect of capital expenditure incurred in relation to research and development and allowable set up and administration costs incurred in this period. It is expected that the relief claimable as sideways loss relief will be approximately £1,049,000 which should result in refunds of £419,600. A refund will be claimable by the Class B limited partner after 5 April 2007."

It is set out in more detail later in the Memorandum.

14 The payment of the guaranteed licence fee is further explained to result from the collaboration of the R&D Contractor with PepTcell Ltd. The contention is that PepTcell Ltd has a technological advantage in undertaking the research and

development by the use of its own technology as compared with the traditional approach to the research. This is because it has developed a novel algorithm that should accurately predict the molecules needed for a vaccine to induce active immunity from among the possibilities identified in the research. It should therefore "be able to carry out, in days and weeks, research work that would normally take years." As a result the R&D Contractor would benefit from cost savings in conducting its research as compared with the traditional method of research, and part of those savings could be passed on to the Class B Limited Partners in the form of the guaranteed licence fee.

15 The picture that emerges for the £1 million investor is as follows. He or she takes out an £800K loan and contributes a further £270K on joining The Partnership in 2006-07. He or she has the assurance that a guaranteed minimum licence fee will meet the costs of repaying the loan of £800K and interest in full. So - although the debt was in the form of a full recourse loan - the borrower would be entitled to assume that in reality he or she would have no further concerns about meeting the liability once the initial paperwork was completed. As to the additional £270,000 he or she must find, that would be met in full in due course by the £419,600 refund payable by HMRC to him or her in respect of sideways loss relief after 5 April 2007. That, of course, assumes that the partner is a UK tax resident and that he or she has other income tax liability such that the refund is at the full 40 per cent rate. As Matrix ensured that all Class B Limited Partners were UK residents and the proposal was marketed only to high net worth individuals, that assumption would be justified. Within one year, according to the plan, the investor would have received a net benefit in the form of a tax refund (so not further taxable) which would be worth 1.6 times his or her original risk capital of £ 270,000. However, the Memorandum does caution about the assumptions in the example. This includes the comment that the illustration is drafted on the basis that HMRC would treat the Partners as trading on a commercial basis with a view of profit.

16 A significant section of the Memorandum is devoted to what may in broad terms be called the science, with background notes on both immunology and vaccines and on the vaccine market. It also details careful arrangements about liabilities and benefits from existing intellectual property held by PepTcell Ltd that was made available to the Partners with regard to any positive outcome from the research. However, we find as fact that the scientific detail is a minor aspect of the proposal viewed as a whole from the standpoint of the Class B Limited Partner.

17 We consider that we should, as the fact finding tribunal, record our findings on the scientific evidence that played a significant part in the conduct of the hearing by both parties. However, although we were offered considerable information about the research by PepTcell Ltd, we find that the scientific evidence is of limited importance in dealing with this appeal. It was accepted throughout by the respondents, HMRC, that the research activities of PepTcell Ltd were relevant research and development activities for the purposes of the allowances and losses claimed. In our view, little turns on the detail of that research. What is in dispute is the financial structure that was put in place, HMRC submits, to fund that research. That must be examined in

detail below. We therefore confine our findings on the scientific evidence to an annex to this decision, while emphasising that that annex constitutes our findings of fact on those issues should we be wrong in placing limited relevance on them.

The chronology of the Scheme

18 The Scheme took effect in August 2006. The specific steps by which the Scheme was put in place are listed in an annex to the decision in the form of a chronology. Although this chronology starts with a date in April 2006, it is clear to us from the evidence, and we so find as fact, that the discussions about the Scheme started in detail some time before then. In particular, we find that the Bank of Scotland (BOS) and the Royal Bank of Scotland (RBS) were involved in detailed discussions at least in February 2006. For example, in the flurry of emails between the various parties and their advisers in August 2006, reference was expressly made in an email about the letters of credit and agreements involving RBS and BOS to "this principle was agreed back in January when reciprocal LC was agreed between the two banks" (email from a participant in the negotiations to others on 16 08 2006, produced by one of the banks under a Schedule 36 direction by the tribunal). In that context, we accept the submission that some of the undated documents produced under direction by the banks probably date back to the beginning of 2006. These show the underlying Scheme was put to the banks then and their roles as providers of financial facilities to the Class B Limited Partners discussed. The Scheme referred to the R&D Contractor, later named as Numology Ltd, already in place, and the financial contributions to be made by the R&D Contractor and the Class B Limited Partners.

Those involved

19 The appeal involves the following individuals or entities (with our findings about those individuals and entities indicated):

Bank of Scotland plc (BOS)

The bank lent moneys to the Class B Limited Partners of **The Partnership** as part of the Scheme. It did so as part of its ordinary business. BOS was required by direction of the tribunal to produce documents it held about the Scheme.

Dr Berwyn Clarke

Gave expert evidence for HMRC on the scientific research undertaken as part of the Scheme and on the commercial context of that research.

Dr Lia MacLean

Gave expert evidence for The Partnership on the scientific research undertaken as part of the Scheme and on the commercial context of that research.

Gregory Alan Stoloff

Gave oral evidence. He is the founder and managing director of **PepTcell Ltd**, the Research Sub-Contractor to Numology Ltd, at all relevant times for this appeal. He is described in one document as "also a chartered accountant and has spent 15 years in investment banking".

Guy Russell
Gave oral evidence. He was a finance officer of **Matrix Structured Finance LLP,** part of the **Matrix-Securities Ltd** group of companies and associated partners, at the relevant time and was directly involved in developing the Scheme. He was appointed an attorney of **MRD Ltd** by the Board of that company at a meeting on 16 August 2006.

Her Majesty's Revenue and Customs (HMRC)
The respondents in both appeals.

JCT Management Ltd.
A subsidiary of the Jersey Trust Company. The company acted as company secretary to MRD Ltd. It is a Jersey limited company with a registered office at 9 Castle Street, St Helier. The JCT Management Ltd directors are also listed as the directors of MRD Ltd.

Matrix-Securities Ltd (Matrix)
This company and various of its subsidiaries and associated partnerships (including **Matrix Structured Finance LLP**) were responsible for helping develop the Scheme and marketing it to individual investors. It is a limited liability company registered in England and Wales. Matrix published the information memorandum outlining the Scheme to potential investors on 16 June 2006. **Matrix Structured Finance LLP (MSF)** was contracted to provide administrative services to The Partnership. HMRC contended that the chief executive officer of Matrix-Securities Ltd at the relevant time was John Hardy. Mr Hardy was identified in the BoS executive summary of the Scheme as being "director of Matrix Securities and MSF and as a director and shareholder in **PepTcell Ltd**." He was personally involved in the preparation of the information memorandum, as evidenced by a draft produced in evidence by Mr Stoloff and the verification notes supporting it. He also became a Class B Limited Partner in The Partnership.

MRD Ltd
The general partner of **The Partnership**. It is a limited liability company registered in Jersey, with a registered office at 9 Castle Street, St Helier. It was established as White Capricorn Ltd in March 2006, and its name was changed on 5 June 2006. The directors at the relevant time were Stephen A Burnett and Nigel A Le Quesne. The company secretary was JCT Management Ltd (above). It had a paid up capital of £2 on establishment, the shareholders being JCT Securities Ltd and JCT Corporate Services Ltd. Later 100 £1 shares were issued in total, all being held on 1 July 2007 by Matrix-Securities Ltd.

Numology Ltd
The Class A Limited Partner of The Partnership. It was accepted as being a special purpose vehicle set up as the R&D Contractor for the purposes of these arrangements. It is a limited liability company registered in Jersey, with a registered office at 9 Castle Street, St Helier. It was formed under the name of Sky Dynasty Ltd on 6 April 2006, and its name was changed to Numology Ltd on 7 July 2006. **Guy Russell**

informed BOS by email on 5 July 2006 that the Jersey Trust Company would provide the directors, management and administration of Numology Ltd. Its directors at the time were Antony Hillman, Nigel Anthony Le Quesne, Nigel Charles Syvret, Stephen Anthony Burnett and Philip Henry Burgin. All have registered addresses at 9 Castle Street, St Helier. All are named as directors of JCT Management Ltd at the time. Mr Burnett and Mr Le Quesne are also named as directors of **MRD Ltd**. Its only shareholder was JTC Trustees Ltd as trustee for the Trustees of the Monogram Charitable Trust, the holder of 2 £1 ordinary shares in the company. Its company secretary is shown as JCT Management Ltd.

Patrick Lionel Vaughan
One of the individual partners of **The Partnership**, treated in The Partnership Agreement as a Class B Limited Partner. He is recorded in the adherence agreement as making a contribution of £14,400,000 "as working capital in the ordinary course of the business" and an additional sum not exceeding 7 per cent for costs to The Partnership as a limited partner.

PepTcell Ltd (now known under the trading name SEEK).
PepTcell Ltd is a limited liability company registered in England and Wales. It was established in 2004 by **Mr Stoloff**. The directors at the relevant time were Rod Bransgrove, John Hardy, Atif Sarwar, Gregory Stoloff and James Synge. John Hardy, who was also identified as a director of **Matrix Securities Ltd**, was appointed an attorney for MRD Ltd by a meeting of its directors on 16 August 2006.

Royal Bank of Scotland plc (RBS)
The Bank issued a letter of credit as part of the Scheme to secure the entitlement of **The Partnership** to certain payments. It did so as part of its ordinary business activities. RBS was required by tribunal direction to produce documents it held about the Scheme.

Vaccine Research Limited Partnership (The Partnership)
Named as the main appellant in this appeal (though see our comment on this at the head of this decision). It is a Jersey limited partnership. The Partnership first met on 16 August 2006, following which meeting The Partnership was registered in Jersey on 17 August 2006, with a registered office at 9 Castle Street, St Helier. **MRD Ltd** was registered as the general partner, and **Numology Ltd** as the Class A Limited Partner and a number of individuals as Class B Limited Partners.

The full structure of the Scheme

20 We find that the Scheme consisted of a series of interlocking deeds, agreements and arrangements mostly made between 15 August and 17 August 2006, these being put into place as the money was raised from the Class B Limited Partners. There are fuller details, including relevant dates, in the annex setting out the chronology. The main elements of the Scheme are:

(1) A limited partnership agreement entered into by MRD Ltd as general partner and Numology Ltd as the Class A Limited Partner on 15 August 2006. This

established The Partnership. The Class B Limited Partners became parties to this agreement by adherence agreements made on the same day. They were required to pay their capital contributions on 17 August 2006. This was done as to 75 per cent (80 per cent of the sum to be invested after deduction of fees) by drawdown of loan facilities arranged by each Class B Limited Partner with BOS, the balance being provided by the Class B Limited Partners by other means (which sometimes included further loans from BOS).

(2) The Partnership reached agreement on 15 August 2006 with MSF to provide agreed services to The Partnership.

(3) The Partnership entered into a research agreement with Numology Ltd on 17 August 2006 under which Numology Ltd agreed to undertake research and development, or to arrange for it to be undertaken, for The Partnership.

(4) Numology Ltd agreed a Research Sub-Contract with PepTcell Ltd on the same day, 17 August 2006, to undertake research and development of vaccines, with any intellectual property developed being vested in The Partnership. On the same day PepTcell Ltd assigned the benefit of four identified patent applications and inventions to Numology Ltd in pursuance of that agreement.

(5) On the same day, 17 August 2006, Numology Ltd assigned to The Partnership by deed the benefit of the same identified patent applications and inventions as had been assigned to Numology Ltd that day by PepTcell Ltd.

(6) On the same day The Partnership and Numology Ltd concluded a licence agreement under which The Partnership granted licences to Numology Ltd for up to 70 years to use or deal with any products incorporating or based on any of the patents or other intellectual property arising from the vaccine research. In consideration, Numology Ltd agreed to pay guaranteed non-refundable licences fees to The Partnership consisting of 15 specific sums to be paid annually in respect of the following 15 years. It also agreed to pay royalties of 10 per cent of any sums received by it or sub-contractors from the intellectual property. Numology Ltd agreed to guarantee the licence fees by delivering a letter of credit in a scheduled form to The Partnership. A letter of credit in that form was provided by RBS and then delivered that day. Further on the same day, an agreement and deed between The Partnership, Numology Ltd and PepTcell Ltd assigned the benefit and burden of the licence agreement between the Partnership and Numology Ltd to PepTcell Ltd save for the obligation to pay the guaranteed licence fees.

(7) The Partnership and Numology Ltd also agreed on the same day to an option agreement allowing Numology Ltd an exclusive option to purchase any rights in any intellectual property arising from the vaccine research.

(8) By a separate series of agreements made on the same day MRD Ltd, acting on behalf of The Partnership, assigned to BOS the right to receive the guaranteed licence fees payable by Numology Ltd. MRD Ltd notified this to Numology Ltd by an

agreement to which BOS was also party and under which Numology Ltd was given an irrevocable instruction to pay the licence fees direct to BOS. MRD Ltd separately confirmed to BOS that it remained the beneficiary of powers of attorney given by each of the Class B Limited Partners to MRD Ltd in the facility letters to each partner in respect of the loans being made to those partners by BOS. MRD Ltd also made a deed that day with The Partnership and BOS creating a charge over the assets of The Partnership including the licence fees and the licence fee security (the letter of credit from RBS) in favour of BOS.

The oral evidence

21 Mr Stoloff and Mr Russell gave oral evidence for the Appellants. We record that Mr Russell was the only individual directly involved in any way with The Partnership, the partners and the R&D Contractor, Numology Ltd, who gave evidence. No evidence was received from the partners of The Partnership or Numology Ltd. In particular, we were offered no evidence for the Appellants by or about John Hardy despite what appears to us to be his central role in the Scheme as an individual who was at the same time director of the Matrix group, a joint author of the Memorandum, a director of PepTcell Ltd and a Class B Limited Partner in The Partnership.

22 We agree with the final submissions of Mr Prosser that Mr Russell was of limited value as a witness as he appeared unable to recall much about events at the time save where there was specific documentation involving him. He repeatedly answered questions by saying that he could not recall or by offering the opinion that something "would have" been done. While we accept that any witness trying to recall the detail of events some years after they happened is unlikely to be able to recall in full detail, we gained the impression that Mr Russell was relying on such documents as he had been shown before the hearing to answer questions and was unable to answer substantive questions, for example about other documents, in the absence of those documents. That being so, his evidence added little to the documentary evidence save to the extent he identified his signature on some of them.

23 We note a consistent element to Mr Russell's evidence. This is the considerable involvement of the Matrix group of companies and associated entities in the establishment and running of The Partnership, Numology Ltd and MRD Ltd without clear distinctions between them. Indeed, Mr Russell's evidence of activities after financial close on 17 August 2006 indicate that meetings took place at Matrix's premises and that Matrix representatives held meetings and discussions with partners. No separate mention is made in his evidence of any activity of MRD Ltd during this period although Mr Russell acted for it at closure. Discussions between Numology Ltd and PepTcell Ltd are evidenced as taking place at Matrix premises with Matrix Structured Finance LLP.

24 Mr Stoloff's evidence was as the founder of PepTcell Ltd, and therefore as the head of the company obliged under the Research Sub-Contract to undertake the research, development and exploitation at the heart of the Scheme. Again, we found this evidence of limited assistance. In so far as Mr Stoloff's evidence on scientific

issues was at variance to that of the expert witnesses, we prefer the expert evidence. We do so not least because we accept the scientific qualifications of both experts while noting that Mr Stoloff has no equivalent qualifications. In so far as Mr Stoloff was giving evidence about matters relating to Numology Ltd and The Partnership, we put little weight on that evidence also. As was put to us in final submissions by Mr Prosser, the transcript of his evidence records a number of occasions on which he changed his evidence about the arrangements being made while at the same time he was unable to give details about other aspects of the arrangements. We find that Mr Stoloff was involved with Matrix in establishing the Scheme some months before closure and that there were continuing close links between him and the Matrix group. We consider one other element from Mr Stoloff's evidence deserves attention. This is what we find to be an unpressured, relaxed approach to undertaking the research under the Research Sub-Contract with Numology Ltd. This was inconsistent with the evidence given by the expert witnesses about the potential cost to a competitor in the market place of delay in producing pharmaceuticals. It was also inconsistent with the indications in the Memorandum that the advantage of the PepTcell Ltd approach was that it reduced periods of research from years to weeks and days. With the benefit of hindsight it was clear that PepTcell Ltd did not attempt to start research into some of the areas of the activities programmed into the Research Sub-Contract until some years after the advance payments had been made.

25 We heard evidence from the two expert witnesses identified above. They were presented as experts on the relevant science, both of whom also had relevant commercial experience. We accepted both as witnesses of weight, and have no hesitation in relying, to the extent we need to do so, on that evidence where both witnesses were in agreement. Nor did the differences amount, in our view, to anything undermining the evidence of either. Indeed, it was noticeable that both witnesses were prepared readily to reconsider statements where some alleged inconsistency was pointed out. However, as explained above, we attach limited importance to the scientific issues in the case. This, we emphasise, is not because of the calibre of these witnesses but because we do not consider that the science adds much to the overall view we have formed of the Scheme.

The disputed decisions

26 The appeal by The Partnership arises in respect of the partnership return made for it. On 16 November 2009 HMRC issued a closure notice to The Partnership. This concluded that The Partnership was not carrying on a trade in the UK or at all. Alternatively, The Partnership had not incurred expenditure qualifying for relief under section 437 of the Capital Allowances Act 2001 (CAA). Alternatively, The Partnership had not incurred expenditure deductible in computing the profits of a trade. As a result the loss figure in the return was reduced to £0.

27 On 24 June 2010 HMRC informed Mr Vaughan of a check on his self-assessment return for 2006-2007. A copy of the closure notice to The Partnership was attached. Mr Vaughan was notified that that had the result of reducing his claim for relief to £0. He had claimed losses of £25,815,088, of which £15,320,221 were to be carried back to previous years. A claim was made for loan interest relief and that was

refused. The income tax due for the year was therefore increased by £198,789.80. We did not see, but are prepared to assume, that similar notices went to the other Class B Limited Partners.

The sums involved

28 The sum claimed by The Partnership in the amended return as a loss was £192,702,989. Mr Vaughan, as noted, claimed a proportion of that sum.

29 During the hearing, Mr Prosser accepted for HMRC that it was not in dispute that the sum of £14,000,000 – the sum paid to PepTcell Ltd under the Research Sub-Contract by Numology Ltd, the R&D Contractor - was spent, or to be spent, on research and development of a relevant kind. He did not indicate, however, that this was something for which his clients accepted that any claim for tax relief could be made by any specific person involved in the appeal. Nor did he indicate when any allowance could be claimed at that time for that expenditure.

The relevant law

30 Research and development allowances are provided by Part 6 of the Capital Allowances Act 2001 (CAA), codified in sections 437 to 451 of that Act. The provisions relevant here, as enacted for 2006-07 are:

> 437 Research and development allowances
>
> (1) Allowances are available under this Part if a person incurs qualifying expenditure on research and development.
>
> (2) In this Part "research and development" –
>
> (a) has the meaning given by section 837A of ICTA (activities falling to be treated as research and development under generally accepted accounting practice, subject to regulations ...
>
> (3) But –
>
> (a) activities that, as a result of regulations made under section 1006 of ITA 2007, are "research and development" for the purposes of that section are also "research and development" for the purposes of this Part, and
>
> (b) activities that, as a result of any such regulations, are not "research and development" for the purposes of that section are also not "research and development" for the purposes of this Part.
>
> 438 Expenditure on research and development
>
> (1) Expenditure on research and development includes all expenditure incurred for –
>
> (a) carrying out research and development, or
>
> (b) providing facilities for carrying out research and development.
>
> (2) But it does not include expenditure incurred in the acquisition of –
>
> (a) rights in research and development, or
>
> (b) rights arising out of research and development.
>
> ...

439 Qualifying expenditure

(1) In this Part "qualifying expenditure" means capital expenditure incurred by a person on research and development directly undertaken by him or on his behalf if –

(a) he is carrying on a trade when that expenditure is incurred and the research and development relates to that trade, or

(b) after incurring the expenditure he sets up and commences a trade connected to the research and development.

...

(3) The trade by reference to which expenditure is qualifying expenditure is referred to in this Part as "the relevant trade" in relation to that expenditure

(4) If capital expenditure is partly within subsection (1) and partly not, the expenditure is to be apportioned in a just and reasonable manner.

441 Allowances

(1) A person who incurs qualifying expenditure is entitled to an allowance in respect of that expenditure for the relevant chargeable period equal to –

(a) the amount of the qualifying expenditure ...

(2) The relevant chargeable period is –

(a) the chargeable period in which the expenditure is incurred ...

450 Giving effect to allowances and charges

An allowance ... to which the person is entitled ... under this Part for a chargeable period is to be given effect in calculating the profits of the relevant trade, by treating –

(a) The allowance as an expense of the trade ...

31 The wording shown is that applying after the enactment of ITA 2007. The text of section 437 was worded prior to that enactment by reference to section 837A of ICTA. That section empowered regulations to be made. The relevant regulations are the Research and Development (Prescribed Activities) Regulations 2004 (SI 2004/712) which came into effect on 1 April 2004.

32 If The Partnership and/or the partners met those requirements, then there is an allowance claimable as an expense of the trade under section 450. However, if the trade had no profits, or no substantial profits, in that year, so that the net effect of the claim for a research and development allowance is a loss for the year, then the question is whether that loss can be set off against other income.

33 Provision is made for loss relief for trading losses of individuals (including partners) in Part X of ICTA 1988. Here the claim is for a set-off of the claimed loss against general income ("sideways loss relief"). This is provided for by sections 380 to 384A and section 391 of ICTA. We are told that claims have been made by the partners under sections 380 or 381.

34 HMRC contend, however, that any such relief is not available because of these provisions. This is because, it is submitted, the conditions of section 381 of ICTA

(further relief for individuals for losses in early years of trade) are not met. Section 381 provides, as relevant here:

> (1) Where an individual carrying on a trade sustains a loss in the trade in –
> (a) the year of assessment in which it is first carried on by him ...
> he may ... make a claim for relief under this section.
> ...
> (4) Relief shall not be given under subsection (1) in respect of a loss sustained in any period unless ... the trade was carried on throughout that period on a commercial basis and in such a way that profits of the trade ... could reasonably be expected to be realised in that period or within a reasonable time thereafter.

35 HMRC further contend that the partners have not shown that they meet the requirements of section 391:

> In the case of a loss sustained in a trade, profession or vocation carried on wholly outside the United Kingdom, relief under ... sections 380 to 386 ... is given only on –
> (a) the profits of a trade, profession or vocation carried on wholly outside the United Kingdom ...

36 For a successful claim to be made by the individual Limited Partner of The Partnership, the conditions for a claim for research and development allowance must be met as must the conditions for claiming sideways loss relief so that the sums claimed may be set as losses against other income for income tax purposes.

37 Other issues were in dispute between the parties with regard to the amounts to be claimed by the partners by reference to other provisions of the Taxes Acts. These are as follows.

38 As part of the Scheme, a total fee of £7,082,552 was paid by The Partnership to Matrix Structured Finance LLP. 70% of that was claimed to be a payment of a revenue nature incurred by The Partnership as an expense of its trade. HMRC contended that this was not a revenue expense laid out or expended wholly and exclusively for the purposes of the trade, that being the well-known standard test for deductibility of trading expenses under section 74 of ICTA. The deduction was therefore refused.

39 Mr Vaughan claimed relief for interest incurred by him in respect of the loan he took out with BOS to help finance his capital contribution to The Partnership. The relevant provision for this claim is section 362 of ICTA (loan to buy into partnership). Section 362(1) provides that relief may be claimed under section 353 of that Act if it is interest on a loan to an individual to defray money applied, among other things, to the purchase of a share in a partnership. However, subsection (2) must be satisfied. This provides:

(2) The conditions ... are –

(a) That, throughout the period from the application of the proceeds of the loan until the interest was paid, the individual has been a member of the partnership otherwise than –

(i) as a limited partner in a limited partnership registered under the Limited Partnerships Act 1907; or

(ii) as a member of an investment LLP; and

(b) that he shows that in that period he has not recovered any capital from the partnership apart from any amount taken into account under section 363(1).

40 A final point arose under the Partnership (Restrictions on Contributions to a Trade) Regulations 2005 (SI 2005/2017), under which HMRC contended that Mr Vaughan's entitlement to claim losses was also limited. Mr Prosser submitted that there is a point of construction on these regulations in issue in another appeal. As the matter is being argued elsewhere, we were invited not to consider it further but to record the argument so that, if appropriate, the matter could be raised in any appeal from this decision. Having heard from Mr Peacock, we leave the matter on that basis.

How the Scheme was intended to work

41 We have described the plans for the Scheme as put to potential Class B Limited Partners in the Memorandum at paragraphs 7 to 15 above. A full appreciation of the Scheme also involves all the legal agreements that were put in place on the same day, namely 17 August 2006, including the arrangements involving both BOS and RBS to finance the Scheme as noted at paragraph 19 above (and in more detail in the annex). We find that a full appreciation of the Scheme involves examining both how the disclosed plans were executed and how the full arrangements were financed, including the involvement of both BOS and RBS. We have, as already noted, the advantage in making these findings relying in part on the evidence disclosed under formal direction by both banks to the tribunal.

42 At the heart of the Scheme were the plans of PepTcell Ltd. As presented by Mr Stoloff, these were to conduct research into the identification of ways of developing vaccines against major human diseases. This was work to be undertaken over seven years. Mr Stoloff was convinced that he had worked out a method of doing this in a way that would be more time and cost effective than the approach that was put to us as the traditional or conventional method of research. But it nonetheless required substantial capital investment because, as with most such projects, there would be years of expenditure on research and development before any returns could be realised. Mr Stoloff's evidence was that he was unable to raise new capital for his own company. So he entered discussions with Matrix with a view to securing help with the needed investment. The Scheme emerged out of those discussions.

43 In summary, we find that, viewed from the standpoint of Mr Vaughan and the other individual Class B Limited Partners, the Scheme operated in this way. On 15 August 2006 Mr Vaughan signed an Adherence Agreement under which he became a Class B Limited Partner of The Partnership. The following day The Partnership held

its first meeting and agreed to go ahead with the Scheme. Notice of drawdown was given by The Partnership to him and to BOS to provide the required funding on 17 August. That day the required funds were paid in part by transfer by BOS to the account of The Partnership in BOS and in part by the Limited Partner. The various elements of the Scheme came into effect so that the payment of the share of the guaranteed licence payments to which Mr Vaughan was entitled by reason of his Class B Limited Partner status was paid direct to his loan account with BOS.

44 We find much the same is true of the position of the general partner, MRD Ltd. The tribunal was not told anything about the Jersey laws of limited partnerships, and therefore applies the usual assumption that the laws are the same as those for England and Wales. That being so, the role played by limited partners is of course limited by law. It was further limited, as is usually the case, by the terms of The Partnership Agreement. Here MRD Ltd acted as general partner on behalf of all partners in reaching the agreements and arrangements with Numology Ltd, the R&D Contractor, and with MSF as provider of administrative services.

45 Turning to the sums and claims involved in these appeals we find these in summary to be as follows. None of the key figures summarised was in dispute between the parties. The context is that the amount claimed as the total of allowable reliefs for The Partnership is, as stated in paragraph 28 above, £192,702,989.

(1) The underlying total sum that the Appellants state was invested in The Partnership was £193,102,126.20 (the Total Sum).
(2) The Total Sum was derived as to £107,278,959 from the capital contributions of the Class B Limited Partners and as to £85,823,167.20 from the capital contribution of the Class A Limited Partner, Numology Ltd. In addition, £7,082,552 was payable in fees, this being derived from the Class B Limited Partners' contributions (there being no other source shown).
(3) Of the sums contributed by the Class B Limited Partners, 80 per cent of the total after fees were deducted was drawn from the funds provided by BOS as part of the Scheme. Eighty per cent of the net sums contributed from the Class B Limited Partners (as stated in paragraph (2) above) is £85,823,167.20. This is equal to the sum contributed by the Class A Limited Partner.
(4) The Total Sum was paid by The Partnership to Numology Ltd.
(5) Against the Total Sum Numology Ltd paid: its capital contribution to The Partnership; £85,936,665.89 to a deposit account with RBS together with a fee to RBS of £343,766.48; £14,000,000 to PepTcell Ltd; and £6,399,091.34 to Matrix. Other fees paid, including to Centrespur, totalled £599,435.29.
(6) These sums were all transferred on 16 and 17 August.
(7) The sums paid to RBS were the sums required as deposit and fee for the letter of credit behind the guaranteed licence fees.
(8) There were some smaller sums involved both as disbursements and receipts (including interest), but the total of the main payments made by

Numology Ltd to third parties other than The Partnership (that is: the RBS deposit and fee, the PepTcell Ltd payment and the Matrix fee) came to £107,362,984.38.

The contentions put forward for HMRC

46 HMRC did not contest that The Partnership was engaged in a business. Nor did it contend that £14 million paid to PepTcell Ltd was used otherwise than in research and development. But, on these facts, it was contended that The Partnership was not engaged in a trade. This was put as an argument that the Scheme, or essential parts of it, was a sham. In the alternative, if it was not then it was nonetheless not a trade. In the further alternative, if it was engaged in a trade, the trade did not take place in the United Kingdom. In parallel with this, the claim by The Partnership that the total sums incurred on research and development amounted to £193 million was also challenged, as were the sums claimed as expenses and as allowances for interest paid. As we saw it, the arguments put forward for HMRC by Mr Prosser and his team amounted to a challenge to every challengeable aspect of the Scheme. We approach our analysis of the Scheme accordingly. We do so noting that the standpoint robustly adopted by Mr Peacock was that there was absolutely nothing in the evidence on which HMRC could accuse those involved of being parties to a sham and that the arrangements should properly be seen as trading transactions by The Partnership under which it incurred expenditure totalling £193 million on research and development activities for which full tax relief should be confirmed.

47 Before we turn to the questions posed under the CAA 2001, we must deal with the more general challenge to the whole Scheme by Mr Prosser for HMRC. He contended that parts of the Scheme were a sham. It was a clever device to send money round in a circle with only a small part of it actually being incurred on research and development.

48 The following issues therefore arise for decision:

Was the Scheme or any part of it a sham?
If not, was any qualifying capital expenditure incurred on research and development in the relevant period?
If so, was it incurred by The Partnership?
If so, was The Partnership trading?
If so, was it engaged in a trade carried out on a commercial basis throughout 2006-07 in such a way that profits could reasonably be expected to arise either in that period or within a reasonable time thereafter?
If so, was it trading in the United Kingdom?
Were other identified expenses incurred wholly and exclusively for the purposes of that trade?
Was Mr Vaughan entitled to any relief for interest incurred by him in The Partnership?

Was any part of the Scheme a sham?

49 Mr Prosser's first attack on the Scheme was that while The Partnership contended that it has incurred £193 million on expenditure on research and development, that was not so. At most, £14 million had been spent in this way. The other sums were not spent "on" research and development. Mr Prosser argued this not only on the details of the Scheme but more broadly by attacking parts of the Scheme as a sham. The specific attack was on the research agreement concluded by Numology Ltd with The Partnership on 17 August 2006. As Mr Peacock rightly contended, the allegation of sham is an allegation that Numology Ltd and those representing The Partnership had a common intention that the agreement did not create the legal rights and obligations that it appeared to create. This allegation must run to the heart of the credibility and reliability of the evidence given by those said to have been involved in the sham, and we consider this issue first.

50 As we understood it, this argument consisted of three elements. First, while the Agreement purported to show that the funds of The Partnership would be incurred to an estimated total of £185 million on research and development, that was never the intention. Second, Numology Ltd never intended to undertake any research under the Agreement. PepTcell Ltd had agreed to undertake it from the outset of the Scheme. Third, it was agreed throughout that PepTcell Ltd would perform the obligations under the agreement for £14 million by way of the Research Sub-Contract.

51 Mr Peacock resisted this argument robustly. He rightly emphasised the importance of having in mind the authorities defining the extent to which a sham can be alleged in a civil case. We take the relevant test from the well known judgment of Diplock LJ in *Snook v London and West Riding Investments Ltd* [1967] 2 QB 786. As applied here, for the argument of sham to be maintained with regard to the Research Agreement, it must be shown that Numology Ltd and The Partnership (or at any rate those acting for Numology Ltd and The Partnership) had a common intention in entering that Agreement, or parts of it, on the basis that the Agreement did not create the legal rights and obligations that it gave the appearance of creating.

52 We consider that the allegation of fraud is not made good in this case. It is not established solely because, as HMRC allege separately, the total funds were not spent "on" research and development, or because the Scheme could be categorised as artificial. There must be fraud proven to the relevant level. We respectfully take the same view as did Lord Goff in *Ensign Tankers (Leasing) Ltd v Stokes* [1992] STC 220 at 245: "I am prepared (with some hesitation) to accept that the composite transaction which I have just described should not be called a sham, in the narrow sense in which that word has been used in this context...What I have to do, however, is to stand back from the composite transaction; to look at it as a whole; and to decide, first, what is the true nature and effect of the transaction and, second, whether, on a true construction of section 41(1) of the 1971 Act, Victory Partnership is entitled to an allowance in respect of the whole cost of the film...".

53 It is clear in this case, and we so find, that considerable effort was spent in setting up the Scheme, with trouble being taken to create and insert the relevant companies, agreements and deeds into the Scheme as planned. The companies were

established; the deeds and agreements were concluded; the money was passed through accounts as stated. Section 41 of the Finance Act 1971 has now been rewritten into the provisions of CAA 2001 set out above. We must stand back and test it as Lord Goff did.

Was expenditure incurred "on" research and development?

54 As so often in complex tax cases, the core question is in our view one of fact based on the appropriate interpretation of seemingly simple English. Here it is whether the sums contributed to The Partnership, and in particular by Class B Limited Partners, were spent **on** research and development as contended for them by Mr Peacock or were spent **on** that and other things as contended by Mr Prosser.

55 Mr Prosser pressed the tribunal with the authority of the decision of the Supreme Court, sitting recently as a seven judge court, on this issue in *Tower MCashback LLP v HMRC* [2011] UKSC 19, [2011] STC 1143. Although that case concerned the acquisition of software and claims under section 45 of the 2001 Act, we agree with Mr Prosser that the point about the link between the expenditure and the result of that expenditure – the test of "on" – was in issue in that case and that therefore close attention must be paid to the guidance of those judgments. However, with the respect due to that important decision, but bearing in mind its extensive discussion elsewhere, we do not consider it necessary to conduct any detailed analysis of that case in order to derive from it the guidance important here.

56 The main opinion in the case is the weighty opinion of Lord Walker. A short supporting opinion is added by Lord Hope. This we find usefully crystallises the points relevant here in the following:

"[86] The issue, reduced to its simplest terms, is whether the whole of the £27.5m paid by LLP2 to MCashback under the terms of the software licence agreement was expenditure incurred by LLP2 on the provision of software within the meaning of the Capital Allowances Act 2001. The general rule itself is not in doubt. Expenditure is qualifying expenditure if it is capital expenditure on the provision of plant or machinery wholly or partly for the purposes of the qualifying activity carried on by the person incurring the expenditure: CAA, section 11(4). The problem that the facts of this case give rise to is the extent to which surrounding circumstances, such as the source and destination of the funds expended and the commercial soundness of the transaction when looked at as a whole, may be taken into account in an assessment of the question whether the taxpayer was involved in expenditure that entitled it to the allowance claimed.

…

[88] CAA, section 11(4) sets out the general rule that expenditure must satisfy if it is to be qualifying expenditure. Purposively construed, it requires it to be demonstrated in this case that the whole of the claimed expenditure of £27.5m was actually incurred on acquiring rights in the software. This is a factual inquiry, the extent and depth of which will always depend on the circumstances of each case…

…

[93] In Barclays Mercantile Business Finance Ltd v Mawson the House of Lords adopted a practical, commercial approach to the reality of the expenditure. Although the facts of this case lead to a different result, I would adopt the same approach here. As Lord Walker's exacting analysis has shown, they do not support LLPs case that the whole of the claimed expenditure was actually used to acquire the rights in the software. I agree that, in the circumstances of this case, we can and should reach our own conclusion as to the amount that should be allowed in respect of the claimed expenditure."

57 In our view, the first essential issue is to identify what sums came into the Scheme. Then we must identify where those sums went. The key cash flows took place on 16 and 17 August 2006. We find that the reality of what happened during that period was that the Class B Limited Partners contributed £114 million of capital to The Partnership. This was funded as to £86 million by the agreed loans arranged with BOS, and as to the balance of £28 million by other sources arranged by the individual Class B Limited Partners. The £86 million of loans arranged between the Class B Limited Partners and BOS represented 80 per cent of the available capital of The Partnership after the agreed fees of £7 million had been deducted.

58 The Scheme as presented to us showed that at the same time Numology Ltd contributed an amount equal to the total sums raised by the Class B Limited Partners through the BOS loans (£86 million) as its share of The Partnership's capital as the Class A Limited Partner. We agree with Mr Prosser that this was not new money, whether or not it can be described as circulating capital or a set off. We set out above our findings about Numology Ltd. It was a special purpose vehicle with a share capital of £2, both shares being owned by trustees for a charitable trust. We were offered no evidence that it raised any further capital at any relevant period either by raising equity or by any formal bond, or similar arrangement.

59 The only significant source of funds available to Numology Ltd on the evidence before us was from the funds paid across at that time to Numology Ltd from the contributions by the Class B Limited Partners. This is supported by a letter sent to The Partnership by BOS setting out transactions for the period to 5 April 2007. This commented that some of the sums involved had been set off against each other or settled net as allowed in various agreements.

60 This corresponds to the view formed as a matter of law by the tribunal. This is that The Partnership has no separate existence in law from the individual partners for the purposes of income tax. In fact we find that, by whatever name the arrangement is called, the element of funds said to be contributed by Numology Ltd to The Partnership was funded entirely from the contributions of the Class B Limited Partners to The Partnership.

61 We are told, and accept, that the final total of sums raised from the Class B Limited Partners was £114,361,511. (This was comprised of the £107 million capital contributions and the £7 million in fees to Matrix). We take the view that that is the maximum sum that, on any analysis, can be regarded as available for research and

development. That is the total of the funding introduced from outside the Scheme to The Partnership. The sum stated to have been contributed by Numology Ltd in its capacity as a partner of The Partnership, a sum amounting to £85,823,167, is not in reality separate funding. It is not therefore relevant to the claim made both as a matter of law and as a matter of fact.

62 We therefore focus on the sums paid in by the Class B Limited Partners. What, adopting a practical commercial approach, did the Class B Limited Partners receive for their investment? The analysis in the example taken from the Memorandum shows that the practical commercial outcome, if all went according to plan, was that they would receive as tax refunds substantial sums to be set off against other taxable liabilities. Those sums would exceed the amounts they invested in the Scheme from their own resources. They would also receive guaranteed licence fees that completely met the £123.77 million obligations they had incurred in the loans from BOS which they had invested in the Scheme. In addition they would be entitled, in due course, to a share in any royalty income that might result from the research and development being undertaken on their behalf. But we were offered no evidence that such sums were being received at the date of hearing or were in prospect at that date or that there was any strong evidence of them being received in the near future. The commerciality of the investment to an investor, we find as fact, did not depend in practical terms to any extent on the possible returns from those royalties. If the Scheme worked as planned, there would be a clear return on the investment within a much shorter period than that inevitable in pharmaceutical research and, as the Scheme itself used as a selling point, a term with none of the usual risks of an investment in pharmaceutical research.

63 What was the thinking of the partners in making those investments? Did they consider themselves to be engaged in a trade or were they making an investment? We were given no direct evidence about that from the partners themselves. The evidence we received was entirely from third parties who were recipients of the funds, not investors. So we must make our findings on the contextual evidence. That could open the conclusion on the facts that the expenditure on research and development was in fact irrelevant to the investments by the partners except to the extent that they received the relevant tax relief. Indeed, it could be argued that none of the expenditure, on that analysis, was actually on research and development at all. But Mr Prosser did not take his argument that far. We accept his starting point, and find as fact, that the £14 million paid to PepTcell Ltd was paid under a genuine commercial agreement and was paid expressly for pharmaceutical research and development. And that, over the next few years, was the way it was spent.

64 Was any other aspect of the monies raised spent **on** research and development? The total available was the £114 million raised from Class B Limited Partners. Of that, £14 million was paid to PepTcell Ltd. Evidence before us showed that £85,936,665.89 was paid by Numology Ltd to RBS for the required deposit for the letter of credit and together with fees the payment totalled £86.9 million. This was funded from the sums paid to Numology Ltd from the contributions of the Class B Limited Partners. We find this because again we were given no evidence of any other

source of funds available to Numology Ltd at the time. The agreed fee payable to Matrix in respect of the sums raised from the Class B Limited Partners was a sum limited to 7 per cent of the sums raised – actually paid at 6.2 per cent. - payable in addition to rather than from those sums, so somewhat over £7 million.

65 In addition, Numology Ltd paid fees to Matrix of £6.33 million on completion of the Scheme. There were other small sums received by The Partnership, for example as interest, and other sums paid out during the accounting period to 5 April 2007, but no other sums of major significance. In round terms the £114 million from the Class B Limited Partners was paid as to £85.9 on the RBS deposit against the letter of credit, as to £14 million to PepTcell Ltd, as to £0.9 million in fees to RBS and others and as to £13.4 million in fees to Matrix.

66 These figures show clearly that a fundamental part of the Scheme was the arrangement with BOS and RBS for the provision of loans representing around 80 per cent of the total investment by each Class B Limited Partner in a self-contained financing arrangement whereby the capital paid over from The Partnership was used to pay for the guaranteed licence fee which itself was used to pay the full capital and interest payments incurred by each partner in taking out those loans.

67 Mr Peacock resisted this argument by reference in part to the terms of the agreement between Numology Ltd and PepTcell Ltd under which PepTcell Ltd agreed to give a share of future royalties to Numology Ltd. This came about through the chain of agreements and licences under which The Partnership was entitled to any intellectual property (termed "product technology" in the agreements) that resulted from the agreement with Numology Ltd. This was then licensed back, according to the documentation, in exchange for the guaranteed licence fees and a share of any future royalties or similar payments. We do not accept that analysis as establishing that the whole of the sums raised, including the sums said to be raised from Numology Ltd, were indivisible. The sums paid for the guaranteed licence fees are clearly identified in the accounts and agreements identified above. They were obligations, we find on the balance of probabilities, agreed as part of the Scheme but separate from payment of £14 million made to PepTcell Ltd by Numology Ltd to secure research and development of the intended kind. The only source of funds for the payment deposited with RBS to obtain the letter of credit to guarantee the licence fees on the evidence before us was the flow of funds from the capital contributions of the Class B Limited Partners.

68 We conclude that the only sums that in law can be regarded as incurred **on** research and development were the £14 million paid to PepTcell Ltd together with any allowable part of the fees and expenses. So the amounts open to claim by Mr Vaughan and the other Class B Limited Partners as sums spent on research and development are their proportionate shares of that sum. Subject to the question of the deductibility of any related fees or expenses, the other sums incurred by the Class B Limited Partners are not, we find, available for any claim for research and development allowances.

69 That is not a full answer to the case. Any claim by a Class B Limited Partner for a proportionate part of that expenditure must also meet the other requirements of the 2001 Act if it is to be claimed by the individual partners rather than by PepTcell Ltd or some other person.

Was research and development expenditure incurred by the partners?

70 It is accepted for the reasons above that the expenditure of £14 million was on activities that were research and development for the purposes of the 2000 Act. If and in so far as that was incurred by PepTcell Ltd, then it would for that reason be expenditure for which PepTcell Ltd could make a claim. We find as fact that Numology transferred £14 million to PepTcell Ltd on 17 August 2006. That money was paid to Numology Ltd by the Class B Limited Partners through the (tax transparent) medium of The Partnership. And we accept that PepTcell Ltd received the money to spend at some point on research and development.

71 On this basis it was accepted for HMRC that £14 million was paid in return for research and development services. We agree and find as fact that this was so. Put another way, we find that the only sums that fall within the scope of section 438(1) are the sums incurred, to the total of £14 million, on activities undertaken or to be undertaken by PepTcell Ltd plus any other relevant expenses.

Were the partners trading?

72 Section 439(1)(a) requires that a claimant of research and development allowances be carrying on a trade when the expenditure was incurred. Mr Prosser challenged whether The Partnership was trading. Viewed as a whole the activities of The Partnership, he argued, were plainly uncommercial. The partners agreed to pay Numology Ltd for activities which they knew Numology Ltd could not perform directly but under conditions that made the sums non-refundable.

73 Mr Peacock responded that The Partnership was indeed trading. He rehearsed the core of the Scheme as described above and maintained that this was a trading transaction. Activities he identified as constituting trading by The Partnership included: raising the capital from the partners; carrying out due diligence on the proposal; agreeing with MSF that MSF would take certain actions on behalf of The Partnership, including monitoring the performance of the Research Sub-Contractor; entering into the Research Agreement with Numology Ltd; entering into the licence fee arrangements; and enhancing the credit associated with the licence fees by requiring the letter of credit.

74 We were taken to a number of authorities on the meaning of "trade" by both parties, including leading authorities and similar fact analogies. We do not consider that it is necessary to explore either group of those authorities here. "Trade" is another word that on the highest authority is to be given its ordinary meaning in the light of the facts of a particular case. In this case, we have already established that the total sums said to have been spent on setting up The Scheme do not qualify as research and development expenditure save to the extent of the £14 million paid to PepTcell Ltd and any linked expenses. This does not include either the sums said to have been

invested by Numology Ltd in The Partnership or the sums deposited with RBS so that RBS would guarantee the licence payments.

75 We therefore reject Mr Peacock's approach. Even if we had adopted that viewpoint, some of the activities he identified did not point unambiguously to "trade" but could also be examples of investment activities or non-trade business activities, or activities conducted by others. In particular, we do not accept as factually accurate the description that it was The Partnership that negotiated or set up the guarantee behind the licence fees. That had been done some time before The Partnership came into existence, although of course it was only finalised when the Scheme was activated. The best that can be said on the facts is that the Class B Limited Partners adopted the pre-arranged Scheme. Similarly, it is not clear what due diligence can be said to have been undertaken by The Partnership, as against individual partners acting ahead of becoming limited partners and ahead of the conclusion of the various agreements, given that The Partnership did not exist before 16 August 2006.

76 If we focus on the £14 million paid through Numology Ltd to PepTcell Ltd, we see a stronger argument that there were trading activities. Evidence was put before us that enquiries were made by Class B Limited Partners and by agents employed by The Partnership to monitor the activities of PepTcell Ltd. That evidence itself is not entirely persuasive. We comment in our findings on the scientific evidence, for example on the disparity between the evidence about the need to move fast in the research programme to stay ahead of possible competition and the actual speed at which PepTcell Ltd undertook some of the research. But we find, on balance, that in so far as the funding went through to PepTcell Ltd, and arrangements were in place to monitor the activities of PepTcell Ltd, to that extent the Class B Limited Partners were engaged in trading activities. We do not accept that the arrangement of the guaranteed licence fee was a trading activity.

Sideways loss relief

77 If a trade gives rise to a loss in a relevant period, as was claimed to be the case here, then a claim may be made for what is usually termed sideways loss relief. Mr Vaughan made such a claim, the effect of which was to allow the loss he sustained as a Class B Limited Partner to be set off against other income from previous tax years. Mr Prosser challenged that claim also. He did so because, he contended, Mr Vaughan and the other partners did not meet the conditions of section 381(4) of the Income and Corporation Taxes Act 1988 (the 1988 Act).

78 The conditions are that: "Relief shall not be given … in respect of a loss sustained in any period unless ... the trade was carried on throughout that period on a commercial basis and in such a way that profits of the trade ... could reasonably be expected to be realised in that period or within a reasonable time thereafter."

79 Section 381 is one of the provisions in the group of sections 380 to 391 of the Income and Corporation Taxes Act 1988 in Part X Chapter I of the Act (Loss relief: income tax) headed *Trade etc losses*. Section 380 of those sections provides a set-off against general income. Section 381 provides further relief for individuals for losses

in early years of trade and is therefore relevant here. Section 382 contains provisions supplementary to sections 380 and 381. Section 383 is repealed. Section 384 contains further provisions restricting claims under this group of sections.

80 Mr Prosser submitted that two tests were relevant in this case under these sections before the relief under section 381 could be claimed. The trade had to have been carried on throughout the year to 5 April 2007 on a commercial basis. The trade had also to have been carried on in such a way that profits could reasonably be expected within a reasonable period. He contended that on the facts neither of those tests was satisfied.

81 Mr Peacock resisted this argument both as a matter of law and as a matter of fact. His argument was in part that it was to be regretted that HMRC was advancing the argument about reasonable profits in this case because of what he termed an undertaking given in 1960 by the then Chancellor of the Exchequer when addressing the House of Commons on the forerunner to section 384 and cited in the relevant HMRC manual (BIM paragraph 75705): "We are after the extreme cases in which expenditure very greatly exceeds income or any possible income which can ever be made...". We note this indication but we were not asked to read the section subject to this additional proviso, and we see no reason to do so. Any argument that is in effect some sort of estoppel must be pursued elsewhere. In our view the two tests are couched in straightforward language and are to be applied as a matter of fact. In that context, what is a reasonable period in which profits can be expected is a question of fact. In this case we consider that the nature of the activities being undertaken by PepTcell Ltd gives the context for a finding of reasonableness.

82 Were the activities of the partners of The Partnership commercial? Was there a reasonable expectation of profit at some later stage? If we keep the same focus in mind as we took when examining whether the activities were trading activities (namely with regard to the £14 million), we are also prepared to find on balance that the activities linked to the sums paid to PepTcell Ltd were incurred on a commercial basis in such a way that profits could be expected to arise within a reasonable time. The accounts of The Partnership show that the Class B Limited Partners all incurred losses in the year in which the expenditure was incurred. Indeed, that was an inherent part of the Scheme. Was there on the balance of probabilities a realistic expectation of later profits within a reasonable time? We accept that in this area of commercial activity there can be significant delays between initial investment and eventual reward. And we accept that agreements were in place under which the Limited Partners would receive a share of any successful development of vaccines under the Scheme. We also accept that PepTcell Ltd was genuinely engaged in attempting to secure a successful outcome to its activities, and that such an outcome was something that was dependent on the success of the scientific research that it was undertaking. We have no reason to question that the research and development activities of PepTcell Ltd were other than genuine. Accordingly, we consider it reasonable for a profit to be expected from that investment within the scope of the test in section 381.

83 We stress the focus of our finding because Mr Peacock put his argument in a different way. He relied on the accounts of The Partnership to show that The Partnership made a profit in each year after the first. This was because, for accounting purposes, it received the sums payable under the guaranteed licence fee arrangement each year. And these were treated as trading income of The Partnership. Again, we remind ourselves that for income tax purposes we must look through The Partnership to the individual partners. We do not accept that the licence fees can properly be regarded as part of trading income. Our finding as to trade for income tax purposes relates to the sums paid to PepTcell Ltd and the receipts and expected receipts from PepTcell Ltd. We do not regard the payments related to the guaranteed licence arrangements as part of this. Accordingly, we do not accept that The Partnership – that is, the partners - received a trading profit when receiving their shares of those fees.

Was the trade in the United Kingdom?

84 Mr Prosser put this point in issue because The Partnership was established in Jersey under Jersey law. Further, MRD Ltd, the general partner, was a Jersey company, and that company had considerable powers, including powers of attorney, to act for the limited partners in The Partnership. However, this is another question on which we need to look through The Partnership to the individual Class B Limited Partners. It was not disputed that they were all United Kingdom residents for income tax purposes. That again was an element in establishing the Scheme. And we agree with Mr Peacock that the test is whether the activities were wholly outside the United Kingdom. That being so, we see no difficulty in finding that, in so far as the individual partners were engaged in trading activities in relation to their investment to the extent that they were paid to PepTcell Ltd, those activities took place at least in part in the United Kingdom.

Other expenses

85 The Partnership had claimed 70 per cent of the lump sum paid to MSF of just over £7 million as a deductible expense in calculating trading profits for income tax purposes. HMRC had objected to that figure for two reasons. First, that sum could not be said to have been incurred wholly and exclusively for the purposes of the trade being carried on. Second, it was in any event a capital sum not a revenue sum.

86 Both parties criticised the case put forward by the other on this matter as being unfounded in fact. But we were not given any close analysis on the point by either party. The 70 per cent figure was supported for the Appellants on the ground that they did not consider that they could argue that the entire sum was deductible. We understood their argument to be based on pragmatic grounds rather than any issue of law or accounting principle. The argument that it was capital was supported by HMRC on the basis that it was a one-off sum payable for provision of services over a sustained period.

87 The sum or sums incurred are the sums shown as spent by The Partnership in 2006-07 on legal and professional expenses. They were paid for the provision by MSF

of its services under the administrative services agreement concluded on 15 August 2006 (that is, the day The Partnership was established).

88 The Agreement was made by The Partnership acting through MRD Ltd with MSF on the day The Partnership was established. The key provisions were that MSF agreed to provide services (defined in paragraph 2) for the term of the agreement in consideration for a "one-off fee" (the term in the paragraph 3) of 7 per cent of the total contributions of the Class B Limited Partners. There is provision for an additional "incentive fee" but we were not taken to any detail about such a fee. Paragraph 5 provides that the fee is paid for a fixed period of services of 15 years subject to a right to terminate after five years. Paragraph 3 also provides in effect that the sum is payable as the Scheme is established. We find it was paid in full and at that time.

89 We find from this that a single "one-off fee" was payable and was paid for services to be provided for at least 5 years and potentially for 15 years. The amount was related entirely and only to the amount of capital being introduced by the Class B Limited Partners (in other words, to the actual capital being introduced to the Scheme). We have already established that we do not consider that the full amount of that introduced capital was expended on research and development or was properly regarded as used for trading activities. Accordingly, we do not consider that the one-off fee payable in respect of each Class B Limited Partner can be regarded as being expended wholly and exclusively for the purposes of a trade. Nor do we consider that we have been offered any evidence that persuades us that the sum is severable. Accordingly, the sum is not deductible. Alternatively, the sum could be regarded as a capital sum by reference to the basis on which it is calculated, to the period for which it is paid and the time at which it was payable and paid. On either analysis no part of the sum is in our view deductible under section 74(1)(a) of the 1998 Act as it was not in fact "money wholly and exclusively laid out or expended for the purposes of the trade".

Interest relief

90 The final question we are asked to decide is whether Mr Vaughan is entitled to any deduction in respect of the interest he incurred in borrowing the funds to make his investment as a Class B Limited Partner in the Scheme. This is in our view a separate issue to that of the true nature of the Scheme. The question is whether Mr Vaughan (and by implication the other Class B Limited Partners) is entitled to interest relief under section 353 of the 1988 Act in respect of interest paid by him on a loan or loans within the scope of section 362 of that Act (set out above).

91 In our view the arrangement for the individual Class B Limited Partners was not for them to purchase separate shares in The Partnership but to contribute capital to The Partnership. It is therefore allowable, if at all, under the conditions of section 362(1)(b). That provides allowable relief if the money contributed "is used wholly for the purposes of the trade ... carried on by the partnership." We take this to mean that where capital is contributed such that it is used in part for trading and in part for other reasons, the capital used for trading can be the basis for a claim under this section. We

do not consider that the section requires that the whole of any capital contributed must be so used for any relief to be given. There was no contention in this case that any capital was recovered by any partner from The Partnership during the relevant period. Following from the above analysis we therefore find that Mr Vaughan was entitled to relief under this section only to the extent that the sums he contributed as capital to The Partnership were used for the purposes of the trade. That is, they are allowable to the extent that they were used to fund Mr Vaughan's share of the £14 million Research Sub-Contract with PepTcell Ltd and incidental expenses.

Conclusion

92 We allow the appeal on behalf of the Appellants in part but not in full. We find that the appeal is to be allowed to the limited extent that the Class B Limited Partners may claim research and development allowances in respect of their appropriate shares of the total sums incurred by them in funding PepTcell Ltd to the extent of £14 million to conduct relevant research and development for them. And they are entitled to deductions for interest under section 362 for their loans to the extent that these loans were used for trading income.

93 We therefore decide that the decisions against which the appeals are made cannot stand without modification. However, we have not heard from the parties about the precise amounts that Mr Vaughan and the other Class B Limited Partners may claim. Nor do we have appropriate figures readily to hand.

94 We therefore reach this decision as a decision in principle. If the parties are unable to reach agreement on the precise sums to be included in the decisions under appeal to make them consistent with this decision then they are at liberty to seek a further hearing of the tribunal to determine the matter fully.

95 This document, including the annexes, contains full findings of fact and reasons for the decision. Any party dissatisfied with this decision has a right to apply for permission to appeal against it pursuant to Rule 39 of the Tribunal Procedure (First-tier Tribunal) (Tax Chamber) Rules 2009. The application must be received by this Tribunal not later than 56 days after this decision is sent to that party. The parties are referred to "Guidance to accompany a Decision from the First-tier Tribunal (Tax Chamber)" which accompanies and forms part of this decision notice.

DAVID WILLIAMS
TRIBUNAL JUDGE

RELEASE DATE: 27 December 2012

ANNEX A: Chronology of documents and events

We find that the following are relevant to understanding the Scheme as it was realised by those involved, and that the details of each item are as found below. They are listed by date and content.

24 April 2006	Report of a meeting of the Board of Directors of PepTcell Ltd At which Mr Stoloff outlined the Scheme to the Board identifying key details including the role of Numology Ltd.
15 June 2006	Registration of The Partnership in Jersey.
16 June 2006	Information Memorandum by Matrix-Securities Ltd in connection with The Partnership. A draft version shows that the verification (aside from calculations) was by J Hardy and G Stoloff. This was accompanied by application forms that had attached the text of the Adherence Agreement.
7 July 2006	Name change of Sky Dynasty Ltd to Numology Ltd
24 July 2006	Written resolution of PepTcell Ltd signed by all the directors authorising the company to execute various documents involved in the Scheme
27 July 2006	Specimen loan agreement between (1) John Hardy and (2) BOS for a loan of a stated amount required to be 80 per cent exactly of the R&D Contribution of Mr Hardy to The Partnership. Mr Hardy is one of the Class B Limited Partners.
4 August 2006	Written resolution of Numology Ltd resolving that the company execute various documents involved in the Scheme
15 August 2006	Limited Partnership Agreement between (1) MRD Ltd (general partner), (2) Numology Ltd (the Class A Limited Partner) and (3) others (the Class B Limited Partners) establishing The Partnership. The Partnership was established between the general partner and the Class A Limited Partner with other partners adhering. The business of The Partnership is defined as "the exploitation of intellectual property including in the course thereof the research development and exploitation of intellectual property in vaccines for the diseases HIV,

influenza, hepatitis C, rotavirus A, hepatitis B and mosquito protein diseases arising from the research and development"
The Agreement makes provision for The Partnership to handle and secure Partner Loans for Class B Limited Partners.

15 August 2006 — Adherence Agreements made by Mr Vaughan and other individuals to adhere to the Vaccine Partnership and on contribution of capital (in the case of Mr Vaughan of £14,400,000 as working capital) to become Class B Limited Partners. These followed the form set out in Schedule 1 to the Limited Partnership Agreement.

15 August 2006 — Administrative Services Agreement between (1) The Partnership and (2) MSF for MSF to provide agreed services to The Partnership.

16 August 2006 — The first meeting of The Partnership was held that day at 9 Castle Street, St Helier, notice being given the previous day.

16 August 2006 — Meeting of the Board of MRD Ltd (following a meeting the previous day) at 9 Castle Street, St Helier, approving the relevant Scheme documents and authorising Guy Russell, Kerry Wallis and John Hardy "of Matrix Securities Ltd" to act as attorneys for executing the agreements.

16 August 2006 — Notice of drawdown by MRD Ltd as general partner of The Partnership to Numology Ltd requiring payment of £85,823,167.20 to The Partnership account with BOS the following day as its Class A Limited Partner contribution.

17 August 2006 — Research Agreement between (1) The Partnership and (2) Numology Ltd under which The Partnership paid Numology Ltd £193,102,126.60 in consideration for research being undertaken for The Partnership, with any intellectual property generated belonging to The Partnership.

17 August 2006 — Research Sub-Contract between (1) Numology Ltd and (2) PepTcell Ltd for PepTcell Ltd to undertake agreed research for the sum of £14 million with the intellectual property vesting in The Partnership. This provides for payment for research and development as follows:

Influenza vaccine	£4 million
HIV vaccine	£4 million
Hepatitis C vaccine	£1.2 million
Mosquito protein vaccine	£2.4 million
Rotavirus A vaccine	£1.2 million

	Hepatitis B vaccine £1.2 million.
17 August 2006	Deed of Assignment by (1) PepTcell Ltd to (2) Numology Ltd of four identified patent applications and inventions described in them for £1. This is stated to be in pursuance of the Research Sub-Contract.
17 August 2006	Deed of Assignment by (1) Numology Ltd to (2) The Partnership stated to be made in pursuance of the Research Agreement and the agreement between Numology Ltd and PepTcell Ltd of identified patent applications and inventions, being the same applications and inventions as those in the Deed of Assignment to Numology Ltd of the same date, for £1.
17 August 2006	Licence Agreement between (1) The Partnership and (2) Numology Ltd under which The Partnership granted licences to Numology Ltd for 70 years from the proceeds of any patents from the research in return for guaranteed non-refundable annual licence fees totalling £123,767,051.97 and, in broad terms, a royalty of 10 per cent of the net proceeds of exploitation of that intellectual property.
17 August 2006	Option Agreement between (1) The Partnership and (2) Numology Ltd stated to be made pursuant to the Research Agreement between the parties. It grants Numology Ltd an option to purchase option rights specified in the option agreement in respect of intellectual property arising during the course of the vaccine research and the rights under the Licence Agreement save for the right to receive annual licence fees.
17 August 2006	Deed of Assignment between (1) The Partnership (2) Numology Ltd and (3) PepTcell Ltd under which for consideration of £1 Numology Ltd assigned to PepTcell Ltd the benefits under the Option Agreement, PepTcell Ltd accepting the conditions in the Option Agreement as a direct party with The Partnership.
17 August 2006	Deed of Assignment by (1) The Partnership, (2) Numology Ltd and (3) PepTcell Ltd to assign the benefit and burden of the Licence Agreement between The Partnership and Numology Ltd of that date to PepTcell Ltd for consideration of £1, except for the obligation of Numology Ltd to pay the guaranteed annual licence fees to The Partnership.
17 August 2006	Payment by the Class B Limited partners of £114,361,512 and by Numology Ltd as Class A Limited Partner of £85,823,167 to The Partnership as required in the drawdown notices so

	completing the payment of capital into The Partnership.
17 August 2006	Irrevocable letter of credit issued by RBS to The Partnership (acting through MRD Ltd) securing the payment by Numology Ltd to The Partnership of the guaranteed licence fees.
17 August 2006	Notice of assignment and irrevocable payment instructions under which MRD Ltd as general partner of The Partnership assigned to BOS the right to receive the annual licence fees from Numology Ltd under the Licence Agreement.
17 August 2006	Charge over Assets between (1) MRD Ltd and The Partnership and (2) BOS.
17 August 2006	Deposit Agreement and Deposit Charge by (1) Numology Ltd in favour of (2) BOS.
6 July 2007	Partners Report and Financial Statements for The Partnership for the period to 5 April 2007. These show an operating loss of £76,417,626 before setting off interest received. Costs comprised of professional fees of £7,082,552 and R&D expenditure of £69,335,034.
9 July 2007	Partnership tax return for The Partnership in the standard form for the period 15 August 2006 to 5 April 2007 claiming capital allowances of £40,532,193, a gross profit of £5,352,966, other income of £3,958; legal and professional costs of £7,082,552, depreciation of losses of £5,352,966 and other expenses of £69,335,074, resulting in a loss of £76,413,668. £7,477,732 was withheld as disallowable expenses. The resulting loss of £68,935,936, together with the capital allowances was taken to produce a loss of £109,468,129. This was accompanied by partners statements in short form for the partners.
10 October 2007	Amended partnership tax return for The Partnership in the standard form for the same period now showing capital allowances of £193,102,126. The "other expenses" are this time noted as "R&D expenditure written off for accounting purposes only". The loss is calculated as £192,702,988.
24 April 2006	Report of a meeting of the Board of Directors of PepTcell Ltd At which Mr Stoloff outlined the Scheme to the Board identifying key details including the role of Numology Ltd.
15 June 2006	Registration of The Partnership in Jersey.

16 June 2006	Information Memorandum by Matrix-Securities Ltd in connection with The Partnership. A draft version shows that the verification (aside from calculations) was by J Hardy and G Stoloff. This was accompanied by application forms that had attached the text of the Adherence Agreement.
7 July 2006	Name change of Sky Dynasty Ltd to Numology Ltd
24 July 2006	Written resolution of PepTcell Ltd signed by all the directors authorising the company to execute various documents involved in the Scheme
27 July 2006	Specimen loan agreement between (1) John Hardy and (2) BOS for a loan of a stated amount required to be 80 per cent exactly of the R&D Contribution of Mr Hardy to The Partnership. Mr Hardy is one of the Class B Limited Partners.
4 August 2006	Written resolution of Numology Ltd resolving that the company execute various documents involved in the Scheme
15 August 2006	Limited Partnership Agreement between (1) MRD Ltd (general partner), (2) Numology Ltd (the Class A Limited Partner) and (3) others (the Class B Limited Partners) establishing The Partnership. The Partnership was established between the general partner and the Class A Limited Partner with other partners adhering. The business of The Partnership is defined as "the exploitation of intellectual property including in the course thereof the research development and exploitation of intellectual property in vaccines for the diseases HIV, influenza, hepatitis C, rotavirus A, hepatitis B and mosquito protein diseases arising from the research and development" The Agreement makes provision for The Partnership to handle and secure Partner Loans for Class B Limited Partners.
15 August 2006	Adherence Agreements made by Mr Vaughan and other individuals to adhere to the Vaccine Partnership and on contribution of capital (in the case of Mr Vaughan of £14,400,000 as working capital) to become Class B Limited Partners. These followed the form set out in Schedule 1 to the Limited Partnership Agreement.
15 August 2006	Administrative Services Agreement between (1) The Partnership and (2) MSF for MSF to provide agreed services to The Partnership.

16 August 2006 — The first meeting of The Partnership was held that day at 9 Castle Street, St Helier, notice being given the previous day.

16 August 2006 — Meeting of the Board of MRD Ltd (following a meeting the previous day) at 9 Castle Street, St Helier, approving the relevant Scheme documents and authorising Guy Russell, Kerry Wallis and John Hardy "of Matrix Securities Ltd" to act as attorneys for executing the agreements.

16 August 2006 — Notice of drawdown by MRD Ltd as general partner of The Partnership to Numology Ltd requiring payment of £85,823,167.20 to The Partnership account with BOS the following day as its Class A Limited Partner contribution.

17 August 2006 — Research Agreement between (1) The Partnership and (2) Numology Ltd under which The Partnership paid Numology Ltd £193,102,126.60 in consideration for research being undertaken for The Partnership, with any intellectual property generated belonging to The Partnership.

17 August 2006 — Research Sub-Contract between (1) Numology Ltd and (2) PepTcell Ltd for PepTcell Ltd to undertake agreed research for the sum of £14 million with the intellectual property vesting in The Partnership. This provides for payment for research and development as follows:

Influenza vaccine	£4 million
HIV vaccine	£4 million
Hepatitis C vaccine	£1.2 million
Mosquito protein vaccine	£2.4 million
Rotavirus A vaccine	£1.2 million
Hepatitis B vaccine	£1.2 million.

17 August 2006 — Deed of Assignment by (1) PepTcell Ltd to (2) Numology Ltd of four identified patent applications and inventions described in them for £1. This is stated to be in pursuance of the Research Sub-Contract.

17 August 2006 — Deed of Assignment by (1) Numology Ltd to (2) The Partnership stated to be made in pursuance of the Research Agreement and the agreement between Numology Ltd and PepTcell Ltd of identified patent applications and inventions, being the same applications and inventions as those in the Deed of Assignment to Numology Ltd of the same date, for £1.

17 August 2006 — Licence Agreement between (1) The Partnership and (2) Numology Ltd under which The Partnership granted licences to

	Numology Ltd for 70 years from the proceeds of any patents from the research in return for guaranteed non-refundable annual licence fees totalling £123,767,051.97 and, in broad terms, a royalty of 10 per cent of the net proceeds of exploitation of that intellectual property.
17 August 2006	Option Agreement between (1) The Partnership and (2) Numology Ltd stated to be made pursuant to the Research Agreement between the parties. It grants Numology Ltd an option to purchase option rights specified in the option agreement in respect of intellectual property arising during the course of the vaccine research and the rights under the Licence Agreement save for the right to receive annual licence fees.
17 August 2006	Deed of Assignment between (1) The Partnership (2) Numology Ltd and (3) PepTcell Ltd under which for consideration of £1 Numology Ltd assigned to PepTcell Ltd the benefits under the Option Agreement, PepTcell Ltd accepting the conditions in the Option Agreement as a direct party with The Partnership.
17 August 2006	Deed of Assignment by (1) The Partnership, (2) Numology Ltd and (3) PepTcell Ltd to assign the benefit and burden of the Licence Agreement between The Partnership and Numology Ltd of that date to PepTcell Ltd for consideration of £1, except for the obligation of Numology Ltd to pay the guaranteed annual licence fees to The Partnership.
17 August 2006	Payment by the Class B Limited partners of £114,361,512 and by Numology Ltd as Class A Limited Partner of £85,823,167 to The Partnership as required in the drawdown notices so completing the payment of capital into The Partnership.
17 August 2006	Irrevocable letter of credit issued by RBS to The Partnership (acting through MRD Ltd) securing the payment by Numology Ltd to The Partnership of the guaranteed licence fees.
17 August 2006	Notice of assignment and irrevocable payment instructions under which MRD Ltd as general partner of The Partnership assigned to BOS the right to receive the annual licence fees from Numology Ltd under the Licence Agreement.
17 August 2006	Charge over Assets between (1) MRD Ltd and The Partnership and (2) BOS.
17 August 2006	Deposit Agreement and Deposit Charge by (1) Numology Ltd in favour of (2) BOS.

6 July 2007	Partners Report and Financial Statements for The Partnership for the period to 5 April 2007. These show an operating loss of £76,417,626 before setting off interest received. Costs comprised of professional fees of £7,082,552 and R&D expenditure of £69,335,034.
9 July 2007	Partnership tax return for The Partnership in the standard form for the period 15 August 2006 to 5 April 2007 claiming capital allowances of £40,532,193, a gross profit of £5,352,966, other income of £3,958; legal and professional costs of £7,082,552, depreciation of losses of £5,352,966 and other expenses of £69,335,074, resulting in a loss of £76,413,668. £7,477,732 was withheld as disallowable expenses. The resulting loss of £68,935,936, together with the capital allowances was taken to produce a loss of £109,468,129. This was accompanied by partners statements in short form for the partners.
10 October 2007	Amended partnership tax return for The Partnership in the standard form for the same period now showing capital allowances of £193,102,126. The "other expenses" are this time noted as "R&D expenditure written off for accounting purposes only". The loss is calculated as £192,702,988.

ANNEX B: The scientific evidence

1 The Appellants presented us with considerable evidence about the science behind the Scheme. We find that this is of limited relevance to the appeal viewed as a whole. Nonetheless it is relevant to any claim for the £14 million paid by the Class B Limited Partners through The Partnership to Numology Ltd and then under the Research Sub-Contract to PepTcell Ltd. It is also potentially relevant if we are wrong in our analysis of the law in this decision. We therefore summarise our findings about this aspect of the appeal in this annex.

2 The findings are based on the evidence of Mr Stoloff, the founder and CEO of PepTcell Ltd, considered with the evidence of two experts. Dr Lia McLean gave expert evidence for the appellants. Dr Berwyn Clark gave expert evidence for HMRC. As we state in the decision, we found the evidence of both experts convincing as to the science presented. On most issues each reinforced the evidence of the other. We were less persuaded of the scientific expertise of Mr Stoloff. For that reason where Mr Stoloff and one of the experts disagreed, we find that the evidence of the expert is to be preferred.

3 We were given a number of helpful outlines of the scientific issues involved and are grateful for them. But we do not need to repeat those here. Nor do we need to go into the details of how exactly the scientific experiments to be conducted by PepTcell Ltd were to take place. Our concern is with the issues of fact relevant to determining how far if at all (and if so, when and by whom) the sums paid in by the Class B Limited Partners to The Partnership were or were to be spent on research and development of kinds relevant to the tax relief claimed.

The scientific challenge

4 PepTcell Ltd is one of many companies and research units actively involved in seeking to identify ways of preventing or curing some of the world's most serious diseases. These also include the world's largest pharmaceutical companies, major universities and charities as well as governments. It is both a collaborative and a competitive field of research.

5 PepTcell Ltd's involvement in this was truly ambitious given its relative market size. As presented to us, it wished to use the funding provided by the Scheme to conduct research and development of vaccines to assist in the prevention and cure of several major diseases:

Influenza
HIV
Hepatitis C
Mosquito protein vaccine: this extremely ambitious project was to identify vaccines to immunise against the main mosquito borne diseases, including malaria

Rotavirus A
Hepatitis B

Of these programmes, PepTcell Ltd has undertaken research in connection with influenza and HIV and has completed early phases of research in connection with both.

The general approach

6 The focus of the research is primarily on identifying new forms of prophylactic vaccine for these diseases (that is, vaccines to prevent diseases rather than to cure them). An effective vaccine works by challenging the immune system of the person to whom it is given without at the same time giving the disease to the person. If effective, the vaccine will trigger changes in the recipient's immune system so that the system "remembers" the challenge and deals with it promptly if it happens again. A major problem with existing forms of vaccine is that they are unable to deal on a continuing basis with mutating forms of virus that cause these diseases. For example, we were told that the virus behind HIV can mutate in 90 days. As it does so it renders or may render the vaccine dealing with the previous form of HIV ineffective. This is because the new form of the virus is not recognised by the "memory" of the recipient's immune system so the intended reaction by the immune system does not occur.

7 Mr Stoloff explained to us new ways in which the pharmaceutical industry is seeking to tackle this problem. The focus is on cells known as T-cells. T-cells react to proteins being produced by other cells in the individual concerned. The T-cells "recognise" other cells that are part of the same individual, and thereby "recognise" foreign proteins. These foreign proteins are treated as invasive and are then dealt with by the immune system destroying the cells in which they are found. As a virus feeds on a cell, the destruction of the cell will also result in the destruction of the virus.

8 Researchers have noted that only certain elements of a virus mutate, while other elements are conserved or endure through the changes. Research is being shifted towards the identification of these conserved elements of a virus so that these may used as the basis for a vaccine. If a vaccine can be based on a conserved element of a virus then the immunisation of the recipient by the vaccine will endure despite mutations of the non-conserved parts of a virus. Much work has been done on this, and there are now public databases of conserved elements of major forms of virus. However, viruses are complex and a single form of virus may have up to 100,000 conserved elements. Some of those elements will be "presented" to an immune system as they will or can be on the surface of a virus so exposing the protein to which the T-cells can react. Others will not be presented in this way, so remain beyond the detection of the recipient's immune system. So some of the conserved elements will be relevant to the identification of an effective vaccine and others will not.

9 Put simply, the necessary research is into identifying both the conserved elements of a virus and, within that group, those conserved elements that expose their protein to be detectable by the recipient immune system.

10 The scientific challenge is that the existing state of technology is such that this task of identification cannot be undertaken exclusively on a theoretical basis or by using the computational power of modern computers alone. It involves, and must involve, the creation of experimental forms of vaccine and then the use of those experimental forms in challenges to the immune systems of live humans and animals. Only then can it be established if a particular form of vaccine is effective.

11 One further level of complexity was explored in the discussion of the evidence before us. Some proteins are long molecular chains and comprised of many parts. It is necessary for the identification of relevant parts to break those molecules down into epitopes, that is, into portions of a molecule to which antibodies bind. An epitope is itself comprised of a number of parts – called mers – of the molecule. Any experiment of the kind needed for this research involves breaking the molecules into sections. However, it is necessary in conducting research into a particular epitope to ensure that the molecule is divided so that individual epitopes are isolated but not themselves divided in such a way as to destroy an epitope. If a section of a molecule is too large or too small it may not contain the whole of an epitope, or it may contain two or more epitopes. We were told that this research is focussed on epitopes of a typical length of about eight mers (parts or amino acid pieces of the molecule). Dr Clarke stated that the magic number was seven or eight. So the division of the molecule must be conducted in such a way both that an eight-mer epitope is not divided and that the samples include not more than one whole epitope. The approach is often to work on overlapping 15-mer parts of a molecule. Isolation of epitopes potentially requires many repeat examinations of a single molecule to ensure that all the epitopes within it are exposed for testing. It will be done in experiments by the recipient of a vaccine that includes parts of a divided molecule. However, some of this exposure to testing need not be conducted by the experimenters directly. This is because the receiving cells in the recipient (called antigen presenting cells) will themselves break down the parts of the molecules to isolate the epitopes and present them for attack by the T-cells in the immune system. Nonetheless, it is necessary to break down the larger molecules to a considerable extent in this way to conduct the experimental presentations. That adds to the complexity of the research.

12 A methodical approach (sometimes referred to as the traditional approach) to such research is that of trial and error - the systematic creation as a vaccine of each relevant section of each protein comprised within the conserved elements of a virus. Each such vaccine would then be tested to determine whether it triggers an immune reaction. There would then be further testing of combinations of these vaccines to identify a viable vaccine for the majority of the population.

13 For some diseases this exceptional complexity has proved to date to be beyond the reach of existing research capabilities.

14 Short cuts are needed to avoid the need to adopt only a methodical approach. Mr Stoloff considers that he and his research team have identified such a short cut, and furthermore a short cut of use generally to the identification of effective vaccines for multiple diseases and not merely for any one specific disease or virus. He has called this short cut "the Algorithm".

15 An algorithm, in the common meaning of the word as we understand it, is a rule for solving a mathematical problem in a finite number of steps. Here we understand the term to be a description given by Mr Stoloff and his colleagues to a Process, not involving full methodical testing, which comprises a series of 16 key fundamental evaluation mechanisms that seeks to determine the conserved regions within a virus which when presented to the immune system are likely to trigger a reaction such that the T-cells within the immune system would recognise them as foreign and destroy them.

16 PepTcell Ltd has not sought to patent or otherwise protect the elements of the Algorithm because to do so would be to expose its details to competitors. Similarly, PepTcell Ltd did not give the details of the Algorithm to anyone involved in the Scheme. Nor did it do so to us or the expert witnesses. We did not expect it to do so. It is clearly a system that gains its value from both the confidence of the developers in it and the confidentiality with which those developers keep the details of the system from the public domain and in particular from competitors.

17 Mr Stoloff is plainly convinced that the Algorithm is one in which much confidence can be rested. His evidence to us was that in scientific tests it was shown to be working to a 99.98 per cent degree of accuracy as determined through publicly available data within the areas tested. We did not seek analysis of this assertion so make no finding about it. However, it is clear that Mr Stoloff is confident that he and his team have identified in the Algorithm a means of reducing significantly the amount of actual research needed to make progress in identifying candidate proteins to be used as potential bases of the development of new vaccines as compared with a methodical approach of exhaustive trial and error of all the options.

18 Those involved in establishing the Scheme, and those advising them, were invited to take their own views about whether this approach both enabled research to be undertaken with a view to meeting a gap in the market for vaccines and that the research would lead to the development of an effective vaccine in a competitive way. At the same time it was, in Mr Stoloff's view, for those investors to decide whether they wished to accept that the short cuts would occur or whether the research had to be conducted in a full methodical way.

19 Dr McLean made clear in her evidence that what we term the methodical approach (also called the traditional or manual approach in the discussion at the hearing) was not in practice undertaken by any major researcher. It "would be a very extensive and time consuming approach likely to take years and with the cost of many millions of pounds". And "no-one in reality has done that for like a whole virus … it

is in theory perfectly possible to do, but yes, you would have to have the money and the time to actually do it."

20 Dr McLean also commented that the value of the Algorithm lay partly in the fact that it was a platform approach and could be used for different kinds of vaccine and virus.

Specific aspects of the research

21 Dr Clarke accepted in evidence that the approach of using the Algorithm could be used in this way, save that the chances of a successful conclusion for Hepatitis C were extremely small. Having said that, it was not to be overplayed. It was a good tool for identifying epitopes but that was all. He was also strongly critical of the inclusion of both hepatitis B and hepatitis C in the list of projects within the contract scope, but for different reasons.

22 His first specific comment on the list of diseases on which it was proposed to conduct research is that in his view there was no room in the market for a new vaccine for hepatitis B. That view was tested in cross-examination of both Mr Stoloff and Dr Clarke. It was put to Mr Stoloff that hepatitis B had been added to the list of projects at the last minute without any due diligence. Mr Stoloff's answers avoided the issue of the market viability of this research by giving evidence about the due diligence undertaken by Matrix rather than any research undertaken by PepTcell Ltd. He was unable to comment about the market place for a hepatitis B vaccine. But, when it was put expressly to him, he was unable to produce PepTcell Ltd spreadsheets about the market potential for this vaccine in the same way as was produced for HIV, influenza and mosquito proteins. After further questions he also accepted that he knew of nothing internal to Matrix about the issue. We also found it interesting that Mr Stoloff felt confident under examination in answering so clearly for Matrix while being unable to answer fully for PepTcell Ltd. On that basis we find the evidence of Dr Clarke that the market potential for a vaccine produced from the research for hepatitis B that would be adopted by PepTcell Ltd was minimal to be persuasive.

23 Dr Maclean, under cross-examination, gave similar evidence about hepatitis B vaccine. She linked it with comments about rotavirus A, these being the two areas of research added shortly before the Scheme was launched. In her view "those two projects, the hepatitis B and the rotavirus in some respects contradict the overall business model of the whole programme … There are also very, very powerful and very effective commercial vaccines for both hepatitis B and rotavirus … I seriously doubt whether there is the opportunity to adapt PepTcell Ltd's technology for the hepatitis B market and to be competitive against all the hep B vaccines that are currently out there."

24 Dr Clarke raised different issues with regard to a hepatitis C vaccine. In his view the only new incidence of hepatitis C came from drug abuse now that its transmission because of blood transfusion was steadily being eliminated worldwide. So while there is a continuing need for a therapeutic treatment for hepatitis C there was no scope in the market for a new prophylactic vaccine. At the same time there

were problems in developing such a vaccine by the approach being used by PepTcell Ltd – that is, the T-cell approach. He also questioned whether Mr Stoloff was up to date in his knowledge of the relevant science in this area.

25 In cross-examination, Mr Stoloff accepted that research into hepatitis B, hepatitis C and rotavirus A only began in June 2011. This was, he said, because the work on HIV and flu vaccines had been given priority. That, he stated, was consistent with the Research Sub-Contract because that gave PepTcell Ltd five to seven years to undertake the work. That work was ongoing. We find that this evidence suggests that the priority for PepTcell Ltd with regard to these later parts of the agreed research was to undertaken what it was contractually required to do rather than any urgent or prioritised work to seek a market advantage.

Research methodology

26 We were told that the research that Numology Ltd agreed to undertake, or agreed to arrange for others to undertake, was presented to Class B Limited Partners on the ground that the costing should reflect a methodical method (or manual, or traditional - it was called all three in argument) of research. If the Algorithm did not work, then the research would have to be done in the exhaustive way by conducting experiments to eliminate all possibilities in seeking the epitopes necessary to develop the vaccines. This was compared in the evidence with a theoretical method and what we have referred to as short cut methods.

27 This issue was put in cross-examination to Mr Stoloff. He was asked what would happen if the Algorithm failed and to explain the costings put in the formal paperwork for the Scheme about this. He explained that if the Algorithm did not work then the methodical method would have to be used. In answering those questions under cross-examination, Mr Stoloff seemed to us to be unable clearly to focus on PepTcell Ltd as against Numology Ltd, as evidenced by the following exchange:

> A … What I am saying is because the Partnership knew, though, that we were using a short cut method and hence we would make a very large profit on the transaction by using that short cut method –
>
> Q Who is we?
>
> A PepTcell or Numology depending on which one.
>
> Q Well, which is it?
>
> A It is both, depending on the level …

28 From this evidence (and the documentary evidence tested in examination of the three witnesses) we make the following findings of fact. These findings are based on an acceptance of the evidence of both Dr Clarke and Dr MacLean as expert evidence conscientiously given. Indeed, we wish to record our gratitude to both witnesses in taking the trouble they did to explain these difficult matters to us. As

already indicated, where there is a direct conflict between this evidence and the evidence of Mr Stoloff, we accept this evidence.

29 HMRC did not seek to challenge that the actual work in research into and development of the vaccines by PepTcell Ltd was other than research and development of the kinds directly relevant to the claimed allowance in the Capital Allowances Act 2001. We find that it was, while noting that this is not a finding about who undertook the research aside from PepTcell Ltd or when it was undertaken or will be undertaken.

30 In particular, we find that the conduct of that research through the use of the Algorithm is an entirely convincing way of conducting most of the research proposed under the contract between PepTcell Ltd and Numology Ltd. There has been genuine and scientifically valuable research undertaken in this way.

31 We also find that the late additions of hepatitis B and rotavirus A to the research proposal are additions based on pragmatic expediency rather than either clear science or clear market due diligence. They were added not because of a scientific or market justification but because the Scheme devisers saw an opportunity to pump further moneys through the Scheme and needed to be able to offer what was intended to be a plausible explanation why this extra money was needed.

32 We also accept the evidence of Dr Clarke that while the approach of using what Dr MacLean termed the platform of the Algorithm was a good basis for research in most of the areas its approach with regard to hepatitis C was open to serious scientific question.

33 In the light of those findings, we remain puzzled about the admission in evidence that the start of any work by PepTcell Ltd on hepatitis B, hepatitis C and rotavirus A – the three areas questioned in the expert evidence – was held over for a full five years from the start of the involvement of PepTcell Ltd in the Scheme. Dr Maclean gave evidence in forthright terms about the economic costs inherent in delays in research of this sort. If there was, as the evidence of both experts stated and as we find, no real market for a new hepatitis B vaccine in 2006, how could research starting in 2011 be anything other than nominal compliance with a contract about which the other party showed no concern?

34 We take this into account when considering the argument for the Appellants that they or Numology Ltd were supervising in some way the research conducted by PepTcell Ltd. We were not given any evidence of concern shown by Numology Ltd or The Partnership with regard to this timetable despite the extent to which it was sought to stress in the evidence for the Appellants that they were active observers of the project research. We do not wish to cast any doubt on the reality – and the value – of research actually conducted by PepTcell Ltd with the funds provided to it from the Scheme. But we find that this is true for the way in which PepTcell Ltd conducted the research using the Algorithm, and not for the methodical (traditional or manual) approach mentioned as an alternative in the papers. We find that in reality no one

expected the research to be conducted in a full methodical way and that PepTcell Ltd was not funded to do that. Further, as the subsequent delay in part of the programme has shown, it did not have the capacity to do that for the full programme in any event and it did not do it that way.

35 We therefore find that PepTcell Ltd had no expectation, plan or capacity to undertake the research project otherwise than by the use of the Algorithm (in the sense that it would use predictive technology) and that Numology Ltd had no expectation that it would do so. Nor did the partners or Numology Ltd seek to accelerate the research or alter or reprioritise it. Mr Stoloff's evidence about the desire of the investors to have a share in a very large profit suggests that he knew that at least some of those involved in The Partnership knew this as well. In so far as the use of any method other than the method PepTcell Ltd intended to use, and did use, was documented in the Memorandum or elsewhere in the paperwork of the Scheme it was little more than an exercise in the cost of using a methodical method.

36 In taking that view, we regard the references to "the Algorithm" as references to the predictive technology created by PepTcell Ltd, including any ongoing reviews and modifications of that technology. The Algorithm was not put to us as being any specifically defined form of algorithm. The details had never been published and were left vague in evidence for reasons we fully accept. But we would also expect any genuine scientific operation to be reviewing any algorithm it used on an ongoing basis with a view to improving it. We therefore assume that "the Algorithm" in 2012 could be different to "the Algorithm" as used when the Scheme was launched in 2006. For this reason, we find the argument that there was either "the PepTcell Ltd algorithm" or the methodical (or traditional or manual) approach to be a distinction that might be valid on a particular day but was not valid on a continuing basis when presented as alternatives that were mutually exclusive but jointly exhaustive of the possible approaches to the identification of the relevant epitopes. Nor was there discussion before us of the position where the Algorithm proved to be partially effective as a short cut.

37 Taking these findings into account, we do not find that the costs calculation for a methodical approach to the research to be the agreed way forward for the research or the way that the documents show that the research was going forward. To that extent we do not accept Mr Stoloff's evidence that the contract showed that the research would be conducted by the methodical method without any use of the Algorithm (by which, as we understood the evidence, he implied that he meant *any* algorithm). In our view it was a possibility but no more than that. Had we found that this is what the Memorandum and the Scheme documentation said then we would have had to reconsider the validity of the HMRC argument that that part of the relevant documentation was a sham.

ANNEX C: The Partners:

General partner: MRD Ltd

Class A Limited Partner: Numology Ltd

Class B Limited Partners (as recorded in the partnership register at 5 04 2007):

A J Alt
P C Amin
S Anchisi
I G Arthur
N J Blackwell
B N Blyth
E A H Boscawen
R J G Brague
S J Breakwell
M G Clements
M A Cliffe
J E N Cohen
P A Collins
N J Cook
A Cooper
G W Derbyshire
R S Dick
R J Dinkin
J F Dryer
V Dubois-Pelerin
R Duckworth
A C Duncan
K R Duncan
C Eyles
M J Floydd
L Frontini
D Game
D Gelber
S Ghersi
N A Glaister
N H Gohil
M Gohil
J C Goodman
A M Graham
M Guessous
J N Hardy
A J Hartley
N P Higgins
R Hoosenally

G N Jones
H L Katechia
J A B Kennedy
M Krishna
C Ladanyi
A H A Laubi
R M Leitao
F Lynch
P Lynch
D I A Mackinnon
G K Malhotra
A Marcus
J R Marcus
G Marolda
J M McMillan
A H P Midgen
S M Mischler
C Mollenbach
H R Mould
C A Nicholson
K Parekh
J Patel
M M Patel
M Perusat
A J Pisker
J S Platts
G H Pratt
D E Pritchard
D A Randall
E S Ravano
P A Robert-Tissot
D M Simons
A J Small
B J Snee
M R Spalter
A J Stratton
D N Swan
L P Vaughan (the partner whose individual appeal is considered)
K C Vere-Nicoll
D J Walker
B J Westwood
S J Whitehouse
T C Y Yip
J S Young