

PATENTS ACT 1977

IN THE MATTER OF references to the Comptroller under sections 12 and 37 in respect of European patent application publication No. EP0614452 and UK patent No. GB2276438

DECISION

1. PCT application PCT/GB92/02188 naming Robert Anthony Kyffin (hereafter the "opponent" or "Mr Kyffin") as both applicant and inventor was filed on 26 November 1992 at the UK Patent Office as receiving office, claiming priority from two earlier UK applications, namely GB9125423.5 filed 29 November 1991 and GB9214642.2 filed 9 July 1992.

2. The application was published by WIPO on 10 June 1993 with the number WO 93/11084 and subsequently entered the national phase in the UK and before the EPO, being allocated publication numbers GB2276438 and EP0614452 respectively. The UK was no longer designated for the EP application as of 10 March 1995. Notice of grant of the UK application was advertised in the Journal on 26 April 1995.

3. References to the Comptroller for determinations as to entitlement under Sections 37(1) and 12(1) were filed by J W Greaves & Sons Limited (hereafter the "referrers" or "Greaves") on 9 May and 30 April 1996 respectively for the GB patent and EP application. The latter was granted on 15 May 1996. The claims of the respective patents are, with very small differences, virtually identical in scope. Counterstatements were filed by the opponent on 21 August 1996.

4. Evidence rounds were as follows:

- C referrers' evidence-in-chief filed 27 December 1996
- C opponent's evidence-in-chief filed 25 April 1997
- C referrers' evidence-in-reply filed 15 July 1997

C opponent's further evidence filed 18 September 1997

C referrers' further evidence filed 16 October 1997

5. The matter came before me at a substantive hearing on 22 May 1998 at which Mr Peter Colley instructed by Messrs W P Thompson & Co appeared for Greaves, and Mr Kyffin appeared in person.

6. As a preliminary point at the hearing I refused to admit the opponent's late evidence filed shortly before the hearing on 11 May 1998 in the face of objection from the referrers. As a consequence, I did not need to consider the admissibility of proposed further evidence in reply from the referrers.

7. The invention relates to the heat treatment of expansible minerals such as shales, clays and slates to produce lightweight aggregates. Each of the patents in suit comprises a single main method claim and a number of subordinate claims characterised by certain process parameters and the use of an inclined rotary tubular kiln having specified dimensional ratios. Claim 1 of the UK patent reads:

A method of heat treatment of expansible material to form lightweight aggregate using a rotary kiln (10) which is inclined downwardly from its charge end (12) to its discharge end (14), said method comprising heating the interior space of the kiln (10) by means of at least one burner (B1, B2) directed into the kiln from one end thereof, characterised in that the kiln (10) has a maximum length to breadth ratio of 5:1 in that the kiln (10) is heated by the burners (B1, B2) to a substantially constant elevated process temperature, and in that material is fed into the kiln (via 19) so that it occupies a maximum of 10% of the cross-sectional area of the interior space of the kiln at the charge end (12) so that upon entering the kiln the material is subjected almost immediately to said process temperature, heat transfer to the material as it moves along the bottom of the kiln (10) from the charge (12) to the discharge end (14) thereof being primarily by radiation from the combustion space and the lining of the kiln (10) and by direct contact with the lining of the kiln.

Claim 1 of the EP patent is identically worded, except for the addition of the words "...along the whole kiln length..." after the word "temperature" in line six.

8. The basic facts of this case are almost completely agreed and can be summarised as follows.

9. The general idea of heating slate to produce expansion has been known since the 1960's. In 1970 Mr Kyffin and another gentleman (Mr Taylor, who is not involved in these proceedings) approached Greaves with a proposal for developing the idea into a usable process. The parties subsequently signed an agreement ("the 1970 agreement") on 5 August 1970 which provided for Greaves to contribute the bulk of the funding and resources necessary to enable Messrs Kyffin and Taylor to develop the process, although it explicitly excluded any payment to the pair personally for their time.

10. A pilot plant was set up at the Llechwydd Slate Mine using a rotary kiln but the results were not very encouraging and development work stopped. No patent was ever granted on the basis of this work although one had been applied for in 1969 by Mr Kyffin and later abandoned.

11. There was then a considerable period during which nothing happened, until in 1983 Mr Kyffin again approached Greaves with new ideas. A further project was instigated with new partners, *viz* Professor Young of Leeds University, Mr Day, and their company Northern Engineering Consultants Ltd. At this stage there were no formal agreements, although both sides have accepted that some kind of unwritten understanding or "Gentleman's Agreement" developed between them.

12. Construction of a new pilot plant at Llechwydd Slate Mine began in 1985. The plant was commissioned in April 1986. Meanwhile, a patent application had been filed in November 1985, No. GB8528902 in the name of Greaves, which subsequently formed the basis for a priority claim for a European Patent Application which was eventually published as EP0225074. This discloses a furnace having a rotary annular hearth. The named inventors are Messrs Kyffin, Young and Day.

13. As work progressed and results were obtained from the pilot plant, the parties to the gentleman's agreement (who were different to the parties to the 1970 agreement) recognised the need to formalise the relationship between them and they attempted to negotiate a new agreement.

These efforts culminated in 1988 with a document in the form of a draft "Heads of Agreement". This document, which never entered into force, refers to patent application No.GB8528902 and to the pilot plant, and contemplates further development of a process for heat treatment of expansible materials through collaboration between the proposed parties.

14. A further patent application was filed in the name of Greaves on 10 October 1990 (GB9021981.7, claiming priority from GB8922877.9 filed 8 October 1989 and published as GB2236747). This discloses a broadly similar configuration of apparatus to that of Greaves's earlier patent EP0225074 (*ie* an annular hearth furnace), and purports to overcome an alleged drawback in the process whereby particles adhere to the surface of the hearth. This is said to be achieved by the addition of sand to the hearth.

15. On 18 January 1990, an interim agreement ("the 1990 agreement") was entered into by Kyffin, Young, Day, Northern Engineering Consultants and Greaves. This incorporated by reference certain provisions of the draft Heads of Agreement. The 1990 agreement was of limited duration and included provisions governing what would happen if it were not continued, substituted or supplemented within eighteen months. In essence these are that if Greaves were to be reimbursed in full by the other parties within a further 6 months (within a total of 2 years from the date of the agreement, *ie* by 18 January 1992), all rights would transfer to the latter, otherwise as Clause 3(b) states:

"Any application for a patent or any patent the subject-matter of the Heads of Agreement or anything in regard thereto and all know-how and documentation in the possession of the parties hereto or any of them relating to the said Furnace shall be and become the absolute property of [Greaves]..."

16. It is not in dispute between the parties to the present proceedings that the 1990 agreement did terminate and that Greaves was not in fact reimbursed within the specified period. Clause 3(b) did therefore come into operation.

17. Some work was carried out which was indisputably under the agreement, for example a 24 hour production run on the pilot furnace to test the sand bed in June 1990. During this period

Kyffin was paid by Greaves against invoices for his time which he submitted to them. The last such invoice was in respect of 4 days' work carried out in June 1991 and paid on 5 August 1991.

18. On 29 November 1991, GB9125423.5 was filed by Kyffin in his own name. This is the earliest priority document of the patents in suit. The invention relates to a quite different configuration of furnace to that disclosed in Greaves's patents, in that it comprises a rotating tubular arrangement similar to the prior art acknowledged in the latter. I should note here that priority application GB9125423.5 gave rise also a further published patent application No. 2261938A, but this was abandoned before grant in favour of the PCT application giving rise to the patents in suit and does not form the subject of this dispute.

19. Mr Davies wrote to Mr Kyffin on 4 March 1992 confirming the termination of the interim agreement, and suggesting a further meeting to discuss how matters could be further progressed in the light of the changed circumstances. In subsequent correspondence, Mr Kyffin referred to the existence of his new application and suggested carrying out new trials. He also offered to assign rights in the new invention, subject to agreement. There does appear to have been a meeting, the date of which can be inferred as 21 May 1992.

20. Correspondence continued. Mr Kyffin wrote on 14 November 1993 referring to the filing of the PCT application claiming priority from GB9125423.5 and proposing joint ownership subject to conditions, but Greaves was unwilling to embark on further work because of financial considerations. The following is an extract from a letter from Greaves to Mr Kyffin dated 24 November 1993:

"I know well your wish to pursue and progress this project to its completion but must agree with the professionals who are there to guide us that, under the circumstances which regrettably prevail it would be better to wait until it is far more opportune a moment to progress.

How this places your current expenditure is something which you will know better than I, and whether you agree as regards the current timing is again a matter which I am sure

you will wish to further consider.

On our part we were very glad that we were able to meet and I equally hope that this practice can continue so that one can consider the matter again as and when circumstances may change in the hope that we would all be better situated at some time in the future."

21. A further letter from Greaves dated 28 March 1994 suggested that things had not changed.

22. On 7 August 1995 Mr Kyffin wrote to Greaves saying he had reached agreement with others to proceed with the invention. Subsequent correspondence led to the launching of these proceedings.

23. The right to apply for and be granted a patent is governed by section 7 of the Act. Subsections 2 to 4 of that section read:

(2) A patent for an invention may be granted -

- (a) primarily to the inventor or joint inventors;*
- (b) In preference to the foregoing, to any person or persons who, by virtue of any enactment or rule of law, or any foreign law or treaty or international convention, or by virtue of an enforceable term of any agreement entered into with the inventor before the making of the invention, was or were at the time of the making of the invention entitled to the whole of the property in it (other than equitable interests) in the United Kingdom;*
- (c) in any event, to the successor or successors in title of any person or persons mentioned in paragraph (a) or (b) above or any person so mentioned and the successor or successors in title of another person so mentioned; and to no other person.*

(3) In this Act "inventor" in relation to an invention means the actual deviser of the invention and "joint inventor" shall be construed accordingly.

(4) Except so far as the contrary is established, a person who makes an application for a patent shall be taken to be the person who is entitled under subsection (2) above to be granted a patent and two or more persons who make such an application jointly shall be taken to be the persons so entitled.

24. Section 7 sub-section (2) thus makes it clear that an inventor named under a patent is presumed to have the entitlement in it unless there is a overriding enactment, law or agreement, and sub-section (4) establishes a presumption that a person who applies for a patent is the person who is entitled so to do.

25. The resolution of disputes over proprietorship of a granted patent is governed by section 37(1) which reads:

37. - (1) After a patent has been granted for an invention any person having or claiming a proprietary interest in or under the patent may refer to the comptroller the question -

(a) who is or are the true proprietor or proprietors of the patent,

(b) whether the patent should have been granted to the person or persons to whom it was granted, or

(c) whether any right in or under the patent should be transferred or granted to any other person or persons;

and the comptroller shall determine the question and make such order as he thinks fit to give effect to the determination.

26. Section 12 governs disputes over entitlement *inter alia* to PCT applications. Subsection (1) reads as follows:

12. - (1) At any time before a patent is granted for an invention in pursuance of an application made under the law of any country other than the United Kingdom or under any treaty or international convention (whether or not that application has been made) -

(a) any person may refer to the comptroller the question whether he is entitled to be granted (alone or with any other persons) any such patent for that invention or has or would have any right in or under any such patent or an application for such a patent; or

(b) any of two or more co-proprietors of an application for such a patent for that invention

may so refer the question whether any right in or under the application should be transferred or granted to any other person;

and the comptroller shall determine the question so far as he is able to and may make such order as he thinks fit to give effect to the determination.

27. According to Section 12(3), the application of Section 12 to EP and international applications is governed by Section 82, the relevant provisions of which are as follows:

82 (2) Section 12 above shall not confer jurisdiction on the comptroller to determine a question to which this section applies except in accordance with the following provisions of this section.

(3) This section applies to a question arising before the grant of a European patent whether a person has a right to be granted a European patent, or a share in any such patent, and in this section "employer-employee question" means any such question between an employer and an employee, or their successors in title, arising out of an application for a European patent for an invention made by the employee.

(4) The court and the comptroller shall have jurisdiction to determine any question to which this section applies, other than an employer-employee question, if either of the following conditions is satisfied, that is to say -

(a) the applicant has his residence or principal place of business in the United Kingdom; or

(b) the other party claims that the patent should be granted to him and he has his residence or principal place of business in the United Kingdom and the applicant does not have his residence or principal place of business in any of the relevant contracting states;

and also if in either of those cases there is no written evidence that the parties have agreed to submit to the jurisdiction of the competent authority of a relevant contracting state other than the United Kingdom.

28. The criteria of residence laid down in this section are satisfied and there is nothing else here which is of relevance to the present case.

29. Although the wording of Section 12(1) excludes consideration of applications made after the grant of the (or all) foreign patent(s), in this case the proceedings were launched before the grant of the European Patent, so they can continue in being.

30. Since the issues under Sections 12 and 37 are essentially the same, I shall consider them together. The action by Greaves as pleaded is based solely on the terms of the 5 September 1970 agreement and the 18 January 1990 agreement. There is no dispute over inventorship. To put the matter quite simply, Greaves say that Mr Kyffin is bound by these agreements, the scope of which extends to the subject-matter of the patents in suit, notwithstanding that they relate to different types of kiln. If Greaves are right, they will succeed in their reference.

31. To resolve this matter I need to construe the 1970 and 1990 agreements in terms of both the subject-matter covered and the timescales over which they operated. I also need to consider the extent of the obligations (if any) on Mr Kyffin as a result of the admitted Gentleman's Agreement, details of which emerged over the course of the hearing. I had the advantage during the hearing of hearing cross-examination of Mr Davies for the opponents as well as of Mr Kyffin himself. Both gentlemen came over as straightforward and honest in their answers.

32. Mr Colley helpfully drew my attention to the principles I should follow in construing the written agreements. He drew my attention to the case of *Prenn v. Simmonds* [1971] All ER 237 where it was observed *per curiam* that

Although in construing a written agreement a court is entitled to take account of the surrounding circumstances with reference to which the words of the agreement were used and the object, appearing from those circumstances, which the person using them had in view, the court ought not to look at the prior negotiations of the parties as an aid to construction of the written agreement resulting from these negotiations. Evidence should be restricted to evidence of the factual background known to the parties at or before the date of the contract, including evidence of the "genesis" and, objectively, the "aim" of the transaction.

33. A further consideration is that since the 1970 and 1990 agreements were between different parties, the later agreement could not have terminated or modified the earlier one.

The 1970 Agreement

34. The broad objectives of the agreement are set out in the first recital which states

"...the Company [ie Greaves] is concerned accordingly to learn of methods of dealing with or processing slate and in particular (though not exclusively) slate from its own quarries or workings".

35. This is of relatively broad scope and I accept that on this basis the agreement encompasses at least all methods of processing slate waste from Greaves's quarries. The second recital acknowledges that Messrs Kyffin and Taylor had been carrying out their own experimental work for about two years previously aimed at discovering a commercially viable means or procedure for expanding slate and makes some reference to the results of this work.

36. The third recital acknowledges the desire of Greaves to encourage this work, and defines an "initial period" of a little over twenty months during which Greaves would provide funding for further experimental work. It also indicates the desire of the parties to make commercial arrangements fair to both sides, if reasonably practicable, for exploiting the results of the work in the following terms:

"for the turning to account of the information including any discoveries of Kyffin & Taylor which have already emerged or may emerge by the end of the initial period and such information including discoveries together with all such knowledge or conclusions as are reasonably to be inferred from the same is hereafter termed 'the resulting information' ".

37. In Clause 1(2) the agreement provided that Messrs Kyffin and Taylor were not to be paid for their time. Clause 2(1) provides that the resulting information and the whole benefit thereof shall belong half to Greaves and half to Messrs Kyffin and Taylor.

38. Clause 5(1) defines a "scheme period" of 12 months (extendable by agreement) following the initial period, during which Greaves was to use its best endeavours to furnish Messrs Kyffin and Taylor with a draft scheme, presumably for commercialising the process in the light of the work done during the initial period. Provision is made for the parties to have respective buy-out options if no scheme was furnished by the end of the scheme period, and Clause 7(1) provides for joint ownership of the resulting information *inter alia* if such options are not exercised. It is common ground between the parties to the present proceedings that no draft scheme was furnished; neither side of the 1970 agreement attempted to exercise its buy-out option; and that the provisions of Clause 7(1) are therefore operative. A further provision of this clause obliges the parties to join in taking any steps for the most beneficial realisation of the resulting information and to safeguard the information.

39. Thus, as to the timescale over which the agreement operated, it is clear to me that the "resulting information" can be split into two categories as follows:

- C information including any discoveries of Messrs Kyffin & Taylor which have already emerged or may emerge by the end of the initial period; and
- C all such knowledge or conclusions as are reasonably to be inferred from the above.

40. The first category is broad in its ambit but is clearly limited to discoveries etc. made before the end of the initial period.

41. At this point it is convenient to comment that there was some suggestion on behalf of the referrer that the initial period should be regarded as having been extended by mutual consent to encompass the later "gentleman's agreement" phase in the 1980's. However I cannot accept this proposition. Although the 1970 agreement did indeed include a provision for extending the initial period, it also included a very clear end point and had provisions governing what would happen thereafter which covered all contingencies. There was a considerable period of inactivity following the end of the 1970 agreement, and I feel unable to come to any conclusion other than that those provisions did in fact come into operation. There is no evidence that the parties formally sought

to extend the initial period, and the different behaviour of the parties during the 1980's (who were in any case not the same as the parties to the 1970 agreement) in accepting payment for their work (which was excluded by the 1970 agreement) and in acknowledging that the whole of the patent rights should lie with Greaves (rather than half) is consistent with the conclusion that they did not consider its provisions to be any longer operative.

42. For the above reasons, I shall limit my consideration to the second category of information defined above. This is considerably limited by the expression *as are reasonably to be inferred* [*i.e.* from information including discoveries falling within the first category]. Although I am reluctant to import notions of patentability into the construction of this agreement, this expression does suggest the exclusion of information which is generated by inventive activity. Thus, I am unable to construe this as extending to the subject-matter *per se* of significant new inventions which are made after the end of the initial period and which merely build on knowledge within the scope of the "resulting information" obtained before that point.

43. As to the actual body of information which constitutes the "resulting information", I have little evidence of what this might encompass. There was a patent application, but this was never published. Mr Kyffin made the point that the work came to nothing and the information gained was of no commercial value. He did obtain some background information which he described as being in the public domain, and this could conceivably have value depending on how much effort was put into locating and analysing it, but in the absence of evidence it would be in the realm of pure speculation to try to assess whether this amounted to new information which had "emerged" (to use the terminology of the agreement). For the avoidance of doubt however, I confirm that I would not accept that pre-existing information accessed by Mr Kyffin for example simply by reading a book or a published patent specification could be the subject of proprietary rights assigned under the terms of the 1970 agreement.

44. For the above reasons I come to the conclusion that Greaves have not succeeded in establishing to the required level of proof that the subject-matter of the patent in suit is covered by the 1970 agreement.

The Heads of Agreement

45. This document never entered into force and does not therefore in itself bind the parties. However certain of its provisions are incorporated by reference into the 1990 agreement and it is convenient to consider the effect of these before turning to the 1990 Agreement proper.

46. The section on “Definitions” includes the following provisions:

2(a) “Expanded Slate” shall mean the product intended to be produced by the process of passing slate rock and other rocks and materials through a furnace.

2(b) “The Furnace” shall mean the furnace for the production of Expanded Slate invented and designed for the Company for the production of Expanded Slate by the Consultants in association with Mr Kyffin Professor Young and Mr Day the short specification and technical description of which are set out in the Schedule hereto

2(c) “Letters Patent” shall mean the application for a Letters Patent in respect of the invention of the Furnace and the process for the treatment of expansible materials to form Expanded Slate which has been applied for in the name of the Company [...] numbered 8528902 dated [23 November 1985] and all improvements thereto

47. I do not think that there is any dispute that the definition of “Expanded Slate” as such is a general one not linked to the product of any particular process. “The Furnace”, with a capitalised letter “F”, is the furnace which is the subject of the patent application identified in definition (c) and is clearly the annular hearth furnace as developed by Messrs Kyffin, Young and Day during the 1980's.

48. The dispute over the scope of the Heads of Agreement centres on whether it extends to cover processes for production of Expanded Slate other than processes involving use of the Furnace which is the subject-matter of the Letters Patent. Mr Colley drew my attention to the recitals to the Heads of Agreement, the first two of which read as follows:

3(a) The parties hereto have in association with each other been involved in the development of the Furnace and the said process and it is believed by all the parties hereto that the design of the Furnace and the said process is innovative and original in its conception

3(b) The parties hereto other than the Company acknowledge that the funding of the development work in respect of the Furnace and the said process and the trials hereinafter referred to have been paid by the Company and that the Letters Patent has been properly applied for in the name of the Company

49. Clause 4(e)(iv) includes the following provisions:

If they or any of them shall at any time make any improvements upon the said invention or any further inventions relating thereto or to the Furnace or the said process they shall [...] duly assign and convey to and execute and do all such documents and acts as are necessary to vest absolutely in the Company any letters patent or protection so obtained in respect of the said improvements or further inventions.

50. Mr Colley put it to me that the “said process” should be understood from looking at clause 2(a), which refers to the process of passing slate rock and other materials through a furnace (with a small “f”). This is a broad interpretation not limited to any particular furnace, which would undoubtedly strengthen Greaves’s case considerably, because it would extend the scope of the 1990 agreement to any process for producing expanded slate in a furnace generally. However, I am unable to accept it. When I put to Mr Colley the point that viewed in the context, it was not “the process” which was being defined in clause 2(a), but only the “Expanded Slate”, he accepted that the drafting was not wholly clear. Mr Kyffin on the other hand pointed out that recital 3(a) states in terms that the parties believed that the “said process” was “innovative and original in its conception”. This is to my mind a very clear pointer that the parties considered the scope of “said process” to be limited to the subject-matter of the patent application. It would be meaningless to express a belief that a process defined as encompassing prior art is innovative and original. Indeed, it seems to me that the whole tenor of the Heads of Agreement is directed toward the

development of the Furnace as defined in clause 2(b), and thus that the term 'process' in this context is to be read narrowly. I am strengthened in this view by the fact that recital 3(a) uses the singular 'is' in referring to "*the design of the Furnace and the said process ...*" rather than the plural 'are'.

51. That is not the end of the matter however, because clause 4(e)(iv) of the Heads of Agreement makes reference to "*...any improvements upon said invention or any further inventions relating thereto or to the Furnace or the said process...*". Even if the term "process" is to be interpreted narrowly in the context of the use of the "Furnace", there is the question as to whether the patents in suit could fairly be said to be in respect of a **further invention relating to** said process. Mr Colley took me to the dictionary definitions of 'further' and 'relate' in this regard in an attempt to show the words should be interpreted broadly. I do not agree with him, however, that this has the required broadening effect. Given my narrow finding linking 'process' with the annular hearth furnace, I do not see that an invention having as its subject an entirely different type of furnace, such as the inclined rotary tubular furnace of the patents in suit, could be said to be clearly related thereto notwithstanding the similar purpose.

52. For these reasons I am of the opinion that the Heads of Agreement is limited to contemplation of inventions involving the type of furnace disclosed in the patent application referred to in that document and the process involving the use of that furnace.

The 1990 Agreement

53. As I have commented, this agreement refers to provisions of the Heads of Agreement and can only be interpreted by reference thereto. Recital 2 of the 1990 Agreement refers to a further UK Patent Application No. 8922877.9 which had been filed "in respect of the Furnace and the process for the treatment of expansible materials to form Expanded Slate". Recital 3 states that the parties wish to pursue the subject-matter of the Heads of Agreement notwithstanding that the details thereof are not yet agreed. Clause 1 provides that the parties shall be bound by clauses 4(a), (b), (c) and (e) of the Heads of Agreement.

54. The 1990 Agreement anticipated that a binding agreement in continuation or substitution or

supplemental thereto would be entered into within a relatively short period. The operative phase of this agreement is only eighteen months. Provision was made that if such a subsequent agreement was not reached within eighteen months, Messrs Kyffin and Day could exercise an option within a further six months to buy out Greaves's interest by reimbursing them for all the expenses they had incurred in the development of the Furnace, and failing this, "*any application for a patent or any patent the subject-matter of the Heads of Agreement or anything in regard thereto and all know-how and documentation in the possession of the parties hereto or any of them relating to the said Furnace shall be and become the absolute property of the Company ...*". It is not in dispute that no payment was made by Messrs Kyffin and Day and that this latter provision has therefore become operative. The key question to answer is therefore is: are the patents in suit within the scope of the subject-matter of the Heads of Agreement? If the answer to this question is in the affirmative, then Greaves will succeed in their reference. In the light of my conclusion as to the scope of the Heads of Agreement the answer to this must be in the negative, despite Mr Colley's attempts to place a broadening interpretation on the phrase "*or anything in regard thereto*". I find that the patents in suit are, therefore, outside of the scope of the 1990 agreement.

The 'Gentleman's Agreement'

55. At the hearing details emerged of a 'Gentleman's agreement' which both sides have accepted was in being for a considerable time at least during the 1980's when Mr Kyffin (first on his own then with Day and Young) were working with Greaves. During the currency of the Gentleman's Agreement, Messrs Kyffin, Day and Young were engaged on a consultancy basis and Mr Kyffin has confirmed that he was reimbursed against invoices he submitted for his time spent. Mr Kyffin accepted under cross-examination that initially his investigations were not limited to any particular process or furnace. In his own words he agreed with the Company that he would try to look at the whole problem of slate waste. He then started looking at turning the material into a lightweight aggregate by heating. After Professor Young and Mr Day came on the scene, the idea of the annular hearth furnace was developed, and this led to the filing of a patent application which was assigned to Greaves. Development continued under the Gentleman's Agreement and an improvement to the first patent application was made the subject of a new application, also in the name of Greaves. At about this time the parties were under pressure to formalise their

relationship and this led to the negotiation of the Heads of Agreement.

56. Mr Kyffin argued strongly that the focus of the Gentleman's Agreement narrowed as the development work proceeded, from its agreed wide initial scope down to the annular hearth furnace described in Greaves's patent applications. I do not necessarily accept this point of view, and I find persuasive Greaves's argument that if at an earlier stage while still in receipt of payment from them, Mr Kyffin had devised an alternative process not involving the annular hearth furnace, all parties would have assumed that this would become the property of Greaves. However, I do not accept that such an agreement can persist indefinitely and it seems to me that any obligations Mr Kyffin might have been under would certainly have come to an end at the expiry of the 1990 Agreement, since this effectively marked the end of the co-operation between the parties. This makes the timing of the invention an important question.

57. Mr Colley put it to Mr Kyffin under cross-examination that he began thinking about the new invention in September 1989, when he had said that he had looked afresh to see if there was a simple way forward, even if this meant abandoning the annular hearth furnace. Mr Colley pointed out the description of the prior art in the PCT application which mentions the difficulties with pre-existing processes and put it to Mr Kyffin that he only knew about them because of his earlier involvement with Greaves. Mr Kyffin replied that these are matters of public knowledge. Mr Colley argued that even if this were the case, Mr Kyffin would not have been looking had it not been for the fact that Greaves had funded all his research. However I have some difficulty accepting this line of reasoning. Mr Kyffin became interested in slate treatment and had done some work of his own before ever he became associated with Greaves. There was also a considerable period after the end of the active period of the 1970 agreement and before the beginning of the Gentleman's Agreement during which Mr Kyffin was also indisputably working alone. It is therefore entirely plausible that Mr Kyffin acquired considerable knowledge of the prior art outside his association with Greaves, and in the absence of evidence to the contrary I have no reason to doubt Mr Kyffin's assertion that he did in fact do so.

58. As regards the timing of the actual invention, again Mr Kyffin stood his ground under cross-examination that this took place after the expiry of the operative phase of the 1990 agreement

(which happened on 18 July 1991), in his words “in the late summer of 1991”, although he had discussed earlier that summer with Greaves that he would put his mind to “trying to invent a cheaper less fussy solution, obviating the need for development work on any great scale”.

59. This is a very fine point. Does a statement of intent amount to thinking about a problem? And does thinking about a problem amount to making an invention?

60. In practice, I think it is likely that Mr Kyffin bore alternative furnace configurations in mind for the entire time he was associated with Greaves. The invention of the patents in suit is basically a development of a very old design. However apart from the filing date of his earliest priority application which defines the latest possible date, there is no independent evidence about when Mr Kyffin had the idea of the specific improvement to the prior art which is the subject of his new application and thus the patents in suit. In particular, Greaves have failed to establish on the balance of probabilities that this was before the late summer of 1991 as Mr Kyffin has contended. There is therefore no basis for me to come to any conclusion other than that Mr Kyffin is entitled to his patents, and I find that Greaves fail in both their references.

61. It is perhaps worth my commenting, that even if I am incorrect in my finding that the term 'process' as used in the Heads of Agreement (and hence the 1990 agreement) is to be interpreted narrowly, then my decision above that the referrer has failed to establish that the date of invention was before the end of the operative phase of the 1990 agreement then takes effect to rule the 1990 agreement still inapplicable.

62. I should finally refer to the correspondence which took place between the parties between 1992 and 1994 after Mr Kyffin made the first of the contentious applications, and about which much was made at the hearing. Mr Kyffin maintains that Greaves's initial failure to assert their alleged rights amounts to evidence of their understanding at the time of making the agreement about the nature of his obligations towards them, that is that they clearly realised that his new patent application fell outside of the scope of the former agreements. Mr Colley countered by arguing that the letters are consistent with Greaves believing all along that they were the rightful owners of the invention and that they were surprised when Mr Kyffin eventually announced he

had found another partner.

63. I have to say that although I have given these matters only limited evidential weight because they do not effect the pre-existing contractual position, I do find Mr Kyffin's version the more natural one. If Greaves believed they had rights in the invention, it would have been very much in their interests to assert that fact as soon as possible, as once the application had been published, the only way they could safeguard their interests was to see that the application continued in being. Instead they appear to have left it up to Mr Kyffin to decide whether or not to proceed on the basis of his own financial position. Mr Colley would have me believe that Greaves were content for Mr Kyffin to prosecute the application on their behalf because they had no reason to believe that he would not hand it over to them if they asked. However this is not consistent with their failure to react when Mr Kyffin offered to assign the application to them subject to negotiation.

64. Mr Colley suggested that Mr Kyffin's actions were consistent with his changing his mind about what the agreements bound him to do, which is of course a valid point, but I found Mr Kyffin to be a credible witness and I have no reason not to doubt the truth of his testimony about his own understanding of the nature of his contractual obligations.

65. In conclusion, therefore, I find that the referrers, J W Greaves & Son Ltd, have failed to establish on the balance of probabilities that they have any ownership entitlement to patents Nos. GB2276438 or EP0614452.

66. Mr Kyffin has asked for his costs. It is normal for costs in cases such as this to go with the decision, and I therefore have to consider what award is appropriate.

67. There is no reason for me to depart from the normal Comptroller's scale, and on this basis I award Mr Kyffin the sum of £800 (eight hundred pounds) as a contribution toward his costs. Accordingly I order that this sum be paid to Mr Kyffin by the referrers, J W Greaves & Son Ltd.

68. This being a decision on a substantive matter, the period for appeal is six weeks.

Dated this 6th day of July 1998

G M BRIDGES

Superintending Examiner, acting for the Comptroller

THE PATENT OFFICE