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Filed by: Trial Section Merits Panel
Box Interference
Washington, D.C. 20231
Tel: 703-308-9797
Fax: 703-305-0942

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

DANA Z. ANDERSON, TURAN ERDOGAN, and
VICTOR MIZRAHI

Junior Party
(Patent No. 5,327,515),

v.

KENNETH O. HILL, BERNARD Y. MALO,
FRANCOIS C. BILODEAU, and DERWYN C. JOHNSON

Junior Party
(Patent No. 5,367,588),

v.

ELIAS SNITZER, and JOHN D. PROHASKA

Senior Party
(Application 08/310,426)

Patent Interference No. 104,331

Before SCHAFFER, LEE, and MEDLEY, Administrative Patent Judges.

MEDLEY, Administrative Patent Judge.

FINAL DECISION AND JUDGMENT UNDER 37 CFR § 1.658(a)

MAILED

AUG 7 - 2002
PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

A. Introduction

This is a decision on priority between junior parties Anderson and Hill and senior party Snitzer. A final hearing was held 26 April 2002.

B. Findings of fact

The following findings of fact as well as those contained elsewhere in this opinion are supported by a preponderance of the evidence.

1. Anderson is involved on the basis of U.S. Patent 5,327,515, granted 5 July 1994, based on application 08/004,770, filed 14 January 1993.

2. Hill is involved on the basis of U.S. Patent 5,367,588, granted 22 November 1994, based on application 07/969,774, filed 29 October 1992.

3. Snitzer is involved on the basis of U.S. application 08/310,426, filed 22 September 1994.

4. Snitzer has been accorded benefit for the purpose of priority of U.S. application 07/963,839, filed 20 October 1992¹.

5. The interfering subject matter pertains to a method for fabricating Bragg gratings in an optical waveguide by disposing a phase grating mask adjacent and parallel to the optical waveguide and applying a single collimating light beam through the phase

¹ Snitzer's involved application is a straight continuation of the 07/963,839 application.

grating mask.

6. Count 2², the sole count of the interference is as follows:

A method of fabricating a Bragg grating in the interior of an optical waveguide comprising disposing a phase grating mask adjacent and parallel to a photosensitive optical waveguide and applying a single collimating light beam through the mask to said waveguide.

7. The claims of the parties are:

Anderson: 1-8
Hill: 1-24
Snitzer: 11-23 and 25-39

8. The claims of the parties that are designated as corresponding to Count 2³ are:

Anderson: 1, 2 and 5-8
Hill: 1, 5-11 and 17-23
Snitzer: 11-23 and 25-39

9. The claims of the parties that are designated as not corresponding to Count 2⁴ are:

Anderson: 3 and 4
Hill: 2-4, 12-16 and 24
Snitzer: none

² Count 2 was substituted for the original count 1. (Paper 209).

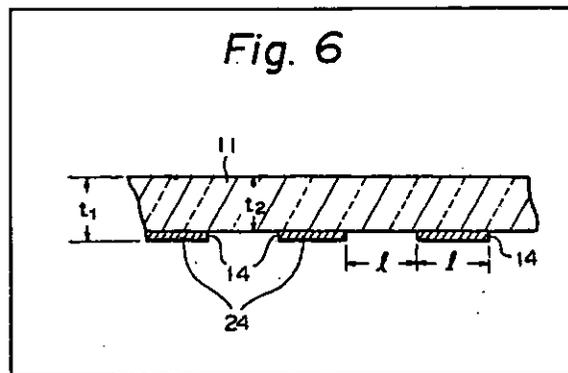
³ See Paper 209.

⁴ See Paper 209.

The invention and the meaning of "phase grating mask"

10. In our decision on preliminary motions, we made a finding that "phase mask" or, "phase grating mask"⁵ as recited in the count, is a transparent mask having varying thickness across the surface of the mask (Paper 208 at 17).

11. Specifically as we discussed in that decision, Shirasaki⁶ shows in Fig. 6 a phase grating mask as shown below.



12. The description of Shirasaki Fig. 6 is as follows:

The illustrated mask is in the form of plate 11 which consists of a material transparent to the exposure radiations such as quartz glass, the plate having selectively formed on a major surface thereof rectangular parallelepiped-shaped projections 24 which also consist of a material transparent to the exposure radiations such as silicon dioxide (SiO_2). (Shirasaki, column 9, lines 59-65).

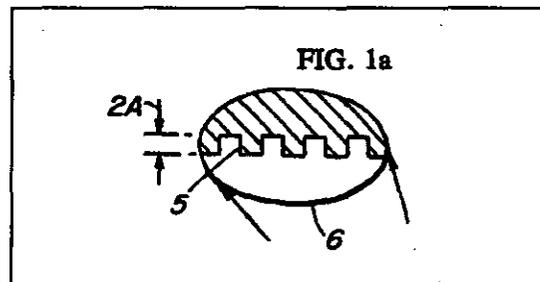
⁵ We use the term "phase mask" and "phase grating mask" interchangeably, as do the parties in their respective briefs.

⁶ Shirasaki et al. (Shirasaki), U.S. Patent 4,806,422, granted February 21, 1989, based on application 06/841,801, filed March 20, 1986.

13. Brooks⁷ states the following with respect to phase masks, distinguishing phase masks from amplitude masks:

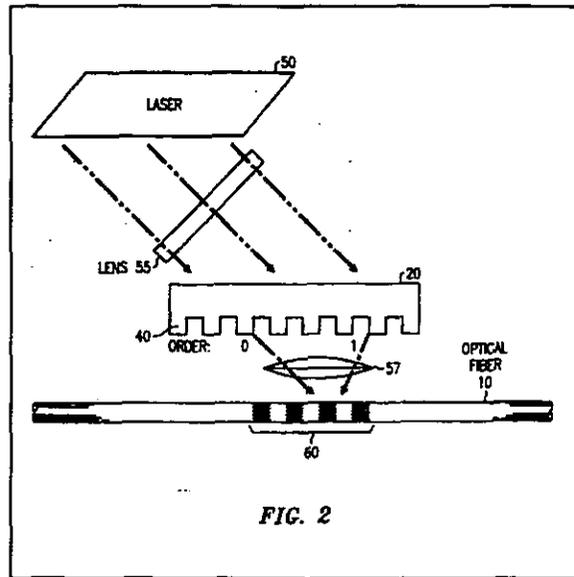
The diffracted light beam 35 eventually impinges on an opaque filter 38. This may, for example, be an opaque plate such as a metallic plate having a suitable pattern cut out. Such a plate may form an amplitude mask which masks the diffracted light beam in accordance with its amplitude. Alternatively a phase mask may be used, this may, for example, consist of glass plate having a varying thickness so as to delay the wave front by different amounts depending on the thickness of the glass. (Column 3, lines 59-65).

14. In the involved Hill patent the "phase grating mask" is shown as a transparent mask, for example, in Fig. 1a with a surface relief pattern 5 approximating a square-wave as shown.



15. In the involved Anderson patent the "phase grating mask" is shown as a transparent mask, for example, in Fig. 2 with a surface relief pattern 40 approximating a square-wave as shown.

⁷ Brooks et al. (Brooks), U.S. Patent 3,668,405, granted 6 June 1972, based on application 04/791,597, filed 16 June 1969. This reference was not relied upon during the prosecution of the involved Hill or Anderson patents or the Snitzer involved application.



16. The involved Snitzer application describes the invention as follows:

It has been discovered that by passing light from a source of the actuation frequency through a mask with periodic variation in transmission, phase, or other optical property a diffraction pattern is formed that can be used to produce a periodic variation in index along the core of an optical waveguide fiber, and thus a Bragg grating. (Snitzer 08/310,426 application, at 1).

17. Thus, the parties were on notice as to our finding of the count term "phase grating mask."

18. None of the parties involved in this interference objected to that finding.

Anderson's Brief on Priority

19. Anderson alleges a date of conception before 2 July 1992 (Paper 274 at 59).

20. Anderson alleges a date of actual reduction to practice of the method of the count on 9 January 1993 (Paper 274 at 63).

21. Anderson alleges acts of diligence toward actually reducing the method of the count to practice, from prior to Hill's 8 September 1992 alleged date of conception until Anderson's alleged date of actual reduction to practice (Paper 274 at 64).

22. Anderson's preliminary statement states that Dana Z. Anderson (Dr. Anderson) and Victor Mizrahi (Dr. Mizrahi) conceived of the invention of the count (Paper 101).

Conception

23. Dr. Anderson was a visiting consultant at AT&T Bell Laboratories in early April 1992 (AR 290, ¶ 3).

24. There, he became acquainted with Dr. Mizrahi's procedures for growing Bragg gratings in photosensitive optical fibers using an interferometer (AR 291, ¶ 4).

25. On April 6, 1992 Dr. Anderson thought of an idea for improving upon the stability of the interferometer by using a fused silica substrate plate with polymer coating to act as a beamsplitter for recombining the original UV beams (AR 291, ¶ 5).

26. According to Dr. Anderson, he had the idea that the beamsplitting plate would also serve as a phase grating mask for growing Bragg gratings, by (i) placing the mask adjacent and parallel to a photosensitive optical fiber and (ii) applying a

single collimated ultraviolet laser beam through the phase mask (AR 291, ¶ 6).

27. Dr. Anderson communicated this idea to Dr. Mizrahi (AR 291, ¶ 7).

28. Anderson alleges that the idea was communicated to Alice E. White (Dr. White), a noninventor.

29. Dr. White was the department head overseeing the group that performed research and development in the field of optical fiber devices, of which Dr. Mizrahi was a part.

30. Dr. White was responsible for hiring Dr. Anderson as a consultant.

31. Dr. White recalls that either Dr. Anderson and/or Dr. Mizrahi communicated to her their idea for the method of the count, no later than May 7, 1992.

32. Dr. White recalls the Anderson inventors conveying to her the idea of placing a phase mask adjacent and parallel to a fiber and applying a single beam of light through the phase mask onto the fiber (AR 295, ¶ 5).

33. Dr. White recalls the event based on a memorandum she prepared, dated May 7, 1992.

34. The memorandum states that "from previous discussions we know Dana [Anderson] to be a fertile source of bold new ideas that have implications, for instance, for the high volume manufacturing of fiber phase gratings" (Anderson Ex. 1027).

35. Dr. White states that her reference to "bold new ideas" was with the thoughts of the method of the count conceived of by Drs. Anderson and Mizrahi (AR 296, ¶ 7).

36. The memorandum was prepared for signature by Alastair M. Glass (Dr. Glass) (Anderson Ex. 1027).

37. Dr. Glass states that he too recalls that the "bold new ideas" referred to in the memorandum involved placing a phase mask adjacent and parallel to a photosensitive optical fiber and applying a single beam of light through the phase mask onto the fiber to make a Bragg grating in the fiber (AR 304, ¶ 6).

38. On 2 July 1992, Dr. White made an entry in her notebook that states:

"Ti - mask - commercially available
- interested in getting phase
mask that can be
placed next to fiber
have second order, want
first order" (Anderson
Ex.1030).

39. Anderson relies on the entry as further evidence of corroboration of the alleged conception (Paper 274 at 59).

40. Dr. White states that she suggested using an ion-implementation method to make a phase mask, and that her notebook entries indicate this (AR 298, ¶ 13).

Acts of diligence

41. Dr. Anderson left Bell Labs in April 1992 and did not return until January 1993.

42. Dr. Anderson states that when he returned to the University of Colorado, he was unable to pursue the fabrication of a phase mask because he lacked the equipment and knew of no person there who could make a phase mask (AR 292, ¶ 10-11).

43. Dr. Erdogan states that during most of 1992, his laboratory did not have a phase mask suitable for making Bragg gratings in optical fibers (AR 284-285, ¶ 17).

44. Dr. Erdogan further states that he and Dr. Mizrahi researched several methods for making a phase mask.

45. Anderson directs us to the following activities regarding Drs. Mizrahi and Erdogan's research for making a phase mask (Paper at 72, Table 2):

a) on **19 November 1992**, Dr. Mizrahi modified his optical system to accept substrates coated with material suggested by Tim Weidman and exposed the coated substrates (AR 273, ¶ 30).

b) on **20 November 1992** and on **23 November 1992**, Dr. Mizrahi exposed planar substrates in an attempt to make a phase mask (AR 273-274, ¶¶ 31-32).

c) on **21 December 1992**, Dr. Erdogan attempted to make a phase mask by patterning a chromium film that was deposited on a silica substrate and impinging a pattern of laser light on the film (AR 285-286, ¶ 19).

d) on **7 January 1993**, Dr. Erdogan used a two beam interferometer to write gratings in samples of Tim

Weidman's photodefinable material to make a phase mask (AR 285, ¶ 18).

e) "in late December 1992 or early January 1993"

Dr. Erdogan states that his lab acquired a chromium-on-silica amplitude mask. The amplitude mask was converted to a phase mask by reactive-ion etching followed by stripping of the chromium (AR 286, ¶ 20). (This phase mask was ultimately the one used to reduce the invention to practice) (AR 286-287, ¶ 22).

f) on 8 January 1993, Dr. Erdogan performed diffraction measurements to characterize the converted mask (AR 286, ¶ 21).

g) on 7 January 1993 and 8 January 1993, Dr. Mizrahi made trial exposures of Tim Weidman's photodefinable material for the purpose of making a phase mask (AR 275, ¶¶ 40 and 41).

Hill's conception

46. Hill alleges an 8 September 1992 date of conception (Paper 272 at 28).

47. Kenneth O. Hill (Dr. Hill), one of the Hill inventors, testified that he, along with B. Malo, F. Bilodeau and D.C. Johnson co-authored "Photosensitivity in Optical Fibers" (Hill manuscript) for Volume 23 of the Annual Review of Materials Science, which he alleges describes the elements of the count (HR 12, ¶¶ 21-22).

48. The Hill manuscript describes the method of the count

(HR 52-53 and 88).

49. To establish the 8 September 1992 date, Hill relies on a receipt received by it from Sandra Cooperman (Cooperman) indicating that the Hill manuscript had been received by the Annual Review Office.

50. The receipt has a date stamped SEP 08 1992, with the words "We acknowledge with thanks the receipt of your manuscript for the Annual Review of MATERIALS SCIENCE".

51. The receipt is signed "Sincerely yours, ANNUAL REVIEWS INC., Sandra Cooperman (Production Editor)".

52. Cooperman has been the Production Editor for the Annual Review of Materials Science (Annual Review) since prior to May 1992.

53. As Production Editor, Cooperman is responsible for organizing and orchestrating an entire series, or volume for the Annual Review (HR 230, line 16 to HR 231, line 7).

54. As further evidence of its date of conception, Hill has submitted into evidence a marked-up copy of the Hill manuscript with SEP 08 1992 stamped on the front page (HR 93).

55. Cooperman testified that when a manuscript arrived at the Annual Review Office, the manuscript was stamped with the day it was received on the front page of the manuscript (HR 270, lines 2-23).

Actual Reduction to Practice

56. Hill relies on its manuscript as an actual reduction to

practice (Paper 272 at 31).

57. Specifically, Hill relies on the description in its manuscript of testing it did to meet the limitations of the count.

Diligence

58. Hill alternatively argues that it reduced to practice its invention by 29 October 1992, when Hill's involved application was filed (Paper 272 at 42).

59. Hill seeks to establish diligence from its 8 September 1992 conception to its constructive reduction to practice (Paper 272 at 42).

60. Hill relies on a letter dated 14 September 1992, requesting Mr. Ed. Pascal to provide a cost estimate for filing a patent application (HR 156).

61. Attached to the letter is a description of the Hill invention (HR 158).

Hill's case of derivation

62. Hill argues that Snitzer derived the invention from it (Paper 311 at 49).

63. Hill alleges that inventor Elias Snitzer received and read a copy of the Hill manuscript sometime after 8 September 1992, but prior to 17 October 1992, when the Snitzer inventors amended their parent '839 application to include use of a phase mask.

64. Elias Snitzer was a guest editor for Volume 23 of the Annual Review of Materials Science.

65. In early April 1992, Dr. Snitzer invited Dr. Hill to write a review for Volume 23 (SR 1032, lines 2-14 and 1033, lines 4-10).

66. Hill alleges that it sent a facsimile to Dr. Snitzer on 24 April 1992, with an outline of the manuscript Hill was to write for Volume 23 (HR 6-7).

67. The facsimile is addressed to "Prof E. Snitzer" at Rutgers University (HR 18).

68. Hill relies on the fax as an indication that Dr. Snitzer was interested in Dr. Hill's article (Paper 272 at 50).

69. Hill does not apparently rely on the fax to demonstrate that the actual contents of the fax were received by Dr. Snitzer, or that the actual content of the fax contains a written description of Hill's conception (Paper 294 at 39).

70. Dr. Hill testified that Cooperman sent him a letter dated 24 April 1992 (HR 23)⁸ confirming that Dr. Hill had agreed to write an article for the review (HR 9, ¶ 15).

71. Dr. Hill alleges that Dr. Snitzer had requested that a copy of the Hill manuscript be sent directly to him (HR 10).

⁸ Snitzer moves to exclude the letter. For reasons given infra at 55, the letter is excluded. However, not excluded is Hill's testimony that he received the letter from Cooperman.

72. Dr. Hill testified that Cooperman sent him a letter dated 12 May 1992 (HR 24)⁹, advising Dr. Hill to send the manuscript to the Office of the Annual Review of Materials Science and not to the guest editors as they had initially requested (HR 9, ¶ 16).

73. The letter states that:

I am aware that Dr. Laudise or Dr. Snitzer asked that the manuscript be sent to them directly but because all production and editing emanates from this office, I request that you send your manuscript here. Please send two copies and I will forward one immediately to the senior editors. (HR 24).

74. Hill's manuscript was received by the Annual Review of Materials Science on 8 September 1992 (Findings 49 and 54).

75. Cooperman testified that the following procedures were followed in connection with the submission of manuscripts for Volume 23 of the Annual Review of Materials Science:

a) the guest editors for the Volume 23 were Robert A. Laudise and Elias Snitzer, whose responsibility was to find the best qualified authors to write on the keynote topic;

b) after the authors produced their manuscripts on the keynote topic, the manuscript was sent to the offices of the Annual Review of Materials Science;

c) when the manuscript arrived at the Annual Review of Materials Science, it was immediately sent to all of the guest

⁹ Snitzer moves to exclude the letter. For reasons given infra at 57, the letter is excluded.

editor(s) to be read;

d) after the manuscript was received by the office, a receipt for the manuscript was sent to the authors;

e) the manuscript was copy-edited in-house and sent to the editor or one of the associate editors for review;

f) the authors then received the manuscript to make comments, ask questions, etc. (HR 214-216).

76. During cross-examination, Cooperman again testified that for Volume 23 a copy of each manuscript for the keynote topic¹⁰ was sent to each guest editor (HR 265, lines 9-10; HR 271, lines 15-17).

77. Although Cooperman testified affirmatively that she would have only sent copies of the manuscript to Dr. Laudise, if he had so requested, she also testified that she did not think that she sent the Hill manuscript only to Dr. Laudise and not to Dr. Snitzer (HR 277, lines 1-23).

78. A fax dated "3/3/93" was sent to Cooperman with an insert "A" made by Dr. Snitzer which is part of the introduction to Volume 23 of the Annual Review of Materials Science (Snitzer Ex. 3035).

79. Hill argues that from the content of the insert, it is clear that Dr. Snitzer read the Hill manuscript (Paper 311 at

¹⁰ There is no dispute that the Hill manuscript was for a keynote topic.

59).

80. Hill submits a comparison of the introduction to Volume 23 with the introduction to Hill's manuscript (Hill Ex. 1058).

81. The comparison shows similarities between the two introductions.

82. Although the insert prepared by Dr. Snitzer does not describe the elements of the count, it does describe generally the concept of writing gratings in optical fibers.

83. Cooperman testified that when a guest editor wrote an introduction that they would know what had been written:

Q And I think we saw in Volume 23 that there was an introduction run by the guest editor.

A That's correct.

Q That's something they can do also.

A Yes.

Q And sometimes guest editors read manuscripts.

A I'm sorry.

Q Sometimes guest editors read manuscripts.

A The guest editors receive copies of all of the manuscripts for the keynote topic simply to read.

Q They are not asked to do the editing that the -

A No, no. The point being that when they wrote the introduction, they would know what had been written; and if they wanted to talk about a specific manuscript, they could. (HR 265,

lines 1-14).

84. Snitzer testified that he received two manuscripts from Dr. Laudise, one by Mahmoud Abouelleil, "Ion Exchange in Glasses and Crystals" and the Nicolaas Bloembergen article (SR 1037, lines 11-22).

85. Hill argues that these two manuscripts could not have been the basis for the description made in the insert "A" by Dr. Snitzer (Paper 311 at 61).

86. Dr. Snitzer testified that he had no recollection of receiving the Hill manuscript (Snitzer Ex. 3005).

87. Dr. Snitzer testified that he did not read the Hill manuscript at any time during the pendency of his '839 application, which issued 27 September 1994 (Snitzer Ex. 3005).

88. Dr. Snitzer testified that he never reviewed the Hill manuscript prior to the filing of the Snitzer '839 application (SR 418, ¶ 45).

89. Dr. Snitzer testified that he never received any manuscripts from Sandra Cooperman (SR 419, ¶ 48).

90. Dr. Snitzer testified that he was busy and that his contributions as guest editor were only to find authors to write articles (SR 417, ¶ 38).

91. He further testified that the late Dr. Laudise, the other guest editor, performed most of the guest editing work (SR 417, ¶ 39).

92. Dr. Snitzer further testified that he sent all pertinent information regarding his application to his patent agent Dr. Stubbs and that he did not send Dr. Stubbs a copy of the Hill manuscript (SR 419, ¶ 46).

93. Dr. Snitzer also testified that he checked his files and did not find a copy of the Hill manuscript (SR 419, ¶ 47).

94. Snitzer further testified that he was not very good at keeping files (SR 972, lines 1-4 and SR 992, lines 19-20).

95. Mr. Wachtman, one of the associate editors for Volume 23, testified that Dr. Snitzer was busy and that it was his impression that Dr. Snitzer took direction from Dr. Laudise, who took a strong interest in the Volume 23 (SR 284).

Snitzer's case of conception

96. Snitzer relies on the oral testimony of the Snitzer inventors to demonstrate that they conceived of the method of the count on 21 July 1992 (Paper 278 at 39).

97. Specifically, Drs. Snitzer and Prohaska testified that they conceived of disposing a periodic object mask, which included using phase masks or amplitude masks, adjacent and parallel to a photosensitive optical waveguide and applying a single collimating light beam through the mask to the fiber (SR 408, ¶ 9; 459, ¶ 13).

98. Snitzer relies on the testimonies of Dr. Rishton and Dr. Stubbs, an Invention Questionnaire, and the oral testimony of

inventor Dr. Prohaska to corroborate a date of conception by the end of July 1992 (Paper 278 at 40).

99. Snitzer argues that the Invention Questionnaire, entitled "Mask Fabrication of Photo Refractive Gratings" describes every element of the count with the exception of a "phase grating mask" (Paper 278 at 41).

100. The Questionnaire refers only to a periodic object mask (Snitzer Ex. 3032).

101. Illustrations and examples of the "periodic object mask" are illustrated as an amplitude mask only (Paper 278 at 44).

102. In July 1992, the Snitzer inventors contacted Dr. Rishton about obtaining a grating mask that the inventors could use in experiments for forming Bragg gratings.

103. In his declaration, Dr. Rishton stated that on 22 July 1992, he spoke with Dr. Snitzer about obtaining a grating mask (SR 470, ¶ 8).

104. Rishton recalls Dr. Snitzer mentioning, during the 22 July 1992 conversation, both amplitude and phase masks and that Snitzer and Rishton discussed the possibilities of fabricating both (SR 470-471, ¶ 9).

105. Rishton recalls a conversation he had with Dr. Prohaska within a few days of speaking with Dr. Snitzer, in which the two discussed the type of mask to be fabricated.

106. According to Rishton, Dr. Prohaska indicated that either a phase mask or an intensity mask would work in their Bragg grating project (SR 471, ¶ 11).

107. Per the conversation, it was determined that Dr. Rishton would manufacture an intensity mask (amplitude mask), since he could do so more quickly (SR 472, ¶ 12).

108. Dr. Rishton was subsequently asked, e.g. after the alleged conception date, to make a phase mask and did so in 1993 (SR 801-802).

109. Dr. Rishton maintained meeting records and lab records regarding the July 1992 conversations he had with the Snitzer inventors (Snitzer Ex. 3039 and 3040).

110. The records do not use the term phase grating mask (phase mask) or otherwise describe a phase grating mask.

111. At one point during cross examination, Dr. Rishton could not recall the term phase mask being discussed during his meeting with either Dr. Snitzer or Dr. Prohaska in late July 1992.

Specifically, Dr. Rishton testified as follows:

Q Okay. You're - referring to Exhibit 3039. At the top of the page you have identified Rutgers grating masks?

A Yes.

Q Was that the term that you recall Dr. Snitzer using during you discussion?

A It was the term I used. I'm not sure if it was the term he used.

Q Do you recall his using any other terms?

A I don't recall it at this point.

Q So to the best of your knowledge no other terms were used by Dr. Snitzer or Dr. Prohaska at that time other than grating masks?

A Not to my memory. (SR 782, lines 7-20).

112. Later, in his cross-examination testimony, Dr. Rishton recalled the term phase mask being discussed with Dr. Prohaska and Dr. Snitzer. (SR 798-799, lines 24-15).

113. Dr. Rishton could not recall if he had ever met Drs. Snitzer or Prohaska in person (SR 754, lines 13-25).

114. Rishton could not recall if he had ever made a mask prior or subsequent to making one for the Snitzer inventors (SR 757, lines 6-15).

115. Rishton could not recall whether he or Dr. Snitzer initiated the phone conversation to discuss making a mask for the Snitzer inventors (SR 771, lines 8-24)

116. Dr. Rishton also did not recall whether he made a presentation at a conference he attended just two months prior to his phone conversation with Dr. Snitzer or Dr. Prohaska (SR 776, lines 2-11).

117. Dr. Prohaska testified that he performed calculations

based on using a phase mask for the Snitzer project within about one or two weeks of his discussion with Dr. Snitzer on 21 July 1992 (SR 464, ¶ 31).

118. Dr. Rishton testified that in the initial discussion with Dr. Snitzer (22 July 1992), that Dr. Snitzer "told me that a phase structure would be better for those for patterning according to their calculations..." (SR 824, lines 17-19).

119. The calculations that Prohaska did, however, were performed after Dr. Rishton's and Dr. Snitzer's initial conversation.

120. Dr. Stubbs, the Snitzer inventor's patent agent, testified that based on a meeting he had with Dr. Snitzer on 30 July 1992, he believed that a mask having any form of periodic variation in optical properties was within the invention, whether they affected phase or amplitude of the transmitted light (SR 487, ¶ 11).

121. Stubbs, during his cross-examination, testified that he could not recall the discussions he had with Dr. Snitzer during the 30 July 1992 meeting (SR 878, lines 5-13).

122. Stubbs does not recall the term phase mask ever being used during the conversations he had with the Snitzer inventors for writing their '839 application (SR 896-897, lines 19-14).

123. Stubbs does not recall a telephone conversation with Dr. Prohaska in which Dr. Prohaska allegedly emphasized that a

phase mask embodiment should be included in the '839 application (SR 899, lines 10-16).

Snitzer's motion to suppress

124. Snitzer has filed a miscellaneous motion to suppress the following of Hill's evidence:

- a) Hill Ex. 2008 - U.S. patent 5,104,209 - a patent issued to the Hill inventors;
- b) Hill Ex. 2016 (paragraphs 3 and 4) of 25 June 1999 Declaration of Sandra H. Cooperman;
- c) Attachment I to Hill Ex. 2016 - duplicate copy of letter from Sandra Cooperman to Kenneth O. Hill (dated 24 April 1992);
- d) Attachment II to Hill Ex. 2016 - duplicate copy of receipt from the Annual Review of Materials Science (dated 8 September 1992);
- e) Hill Ex. 2030 - draft of Prohaska thesis;
- f) Hill Ex. 2044 - a facsimile from Kenneth Hill to E. Snitzer (dated 24 April 1992);
- g) portions of Hill Ex. 2045 - First declaration of Kenneth O. Hill;
- h) Attachment I to Hill Ex. 2045 - duplicate copy of Snitzer fax;
- i) Attachment II to Hill Ex. 2045 - duplicate copy of Cooperman 24 April 1992 letter;
- j) Attachment III to Hill Ex. 2045 - letter from Sandra Cooperman to Authors of Volume 23 of the Annual Review of Materials Science (dated 12 May 1992);
- k) Attachment IV to Hill Ex. 2045 - original manuscript of Kenneth Hill's article for Volume 23 of the Annual Review of Materials Science;
- l) Attachment V to Hill Ex. 2045 - duplicate copy of the Annual Review Receipt;

- m) Attachment VI to Hill Ex. 2045 - Hill's edited manuscript;
- n) Attachment VII to Hill Ex. 2045 - letter from Sandra Cooperman to K.O. Hill (dated 19 March 1999);
- o) portions of Hill Ex. 2046 - the second declaration of Kenneth O. Hill (dated 23 April 2001);
- p) Attachment I to Hill Ex. 2046 - letter from Zaki Muscati to Edward Pascal (dated 14 September 1992);
- q) Attachment II to Hill Ex. 2046 - report of an invention submitted by Hill (dated 10 September 1992);
- r) Hill Ex. 2057 - Publication & Press Guidelines from a Gordon Conference;
- s) Hill Ex. 2058 - comparison of Hill manuscript with the portion of the introduction for Volume 23 that was written by Elias Snitzer;
- t) Hill Ex. 2059 - article by Mahmoud M. Abouelleil from Volume 23 of the Annual Review of Materials Science;
- u) Anderson Ex. 1024 - copy of articles entitled "Magnification of Mask Fabricated Fibre Bragg Gratings" by J.D. Prohaska, E. Snitzer, S Rishton and V. Boegli from Vol. 29, No. 18 of Electronics Letters (2 September 1993).

C. Discussion

Anderson's Case on Priority

Anderson, as the most junior party in this interference, has the burden of establishing priority with respect to both Hill and Snitzer by a preponderance of the evidence. 37 CFR § 1.657(b).

Priority of invention belongs to the first party to reduce the invention to practice unless the other party can establish that it was the first to conceive the invention and that it

exercised reasonable diligence in later reducing the invention to practice. Eaton v. Evans, 204 F.3d 1094, 1097, 53 USPQ2d 1696, 1698 (Fed. Cir. 2000). Here, Anderson alleges an actual reduction to practice date of 9 January 1993. That date, however, is still subsequent to both Hill's and Snitzer's effective filing dates.

Anderson may prevail if Anderson can establish that it was the first to conceive the invention and that it exercised reasonable diligence from a time prior to Hill's and Snitzer's conception until its own reduction to practice. 35 U.S.C. § 102(g); 204 F.3d at 1097, 53 USPQ2d at 1698. Anderson seeks to establish that it conceived prior to Hill's 8 September 1992 alleged date of conception¹¹ and that Anderson was reasonably diligent from a time prior to 8 September 1992 until Anderson's actual reduction to practice date of 9 January 1993.

Snitzer argues that Anderson has failed to prove conception by a preponderance of the evidence. Because Anderson has failed to sufficiently demonstrate that it was diligent in reducing its invention to practice, we have not and need not consider Snitzer's arguments regarding conception. For purposes of this

¹¹ Although Snitzer alleges a prior date of conception of July 22, 1992, Anderson in its brief argues that Snitzer has failed to prove that date of conception. For the reasons discussed infra, we agree that Snitzer has failed to demonstrate a date of conception prior to 17 October 1992. Thus, Anderson must demonstrate that it was diligent from just prior to 8 September 1992 until 9 January 1993.

discussion, we assume that Anderson has demonstrated an April 1992 date of conception.

Diligence

Anderson alleges acts of diligence from a time prior to 8 September 1992, until its actual reduction to practice date of 9 January 1993, e.g. the "critical period." To satisfy the reasonable diligence requirement, the work relied on must ordinarily be directly related to reduction to practice of the invention of the count at issue. Naber v. Cricchi, 567 F.2d 382, 384, 196 USPQ 294, 296 (CCPA 1977).

Dr. Anderson was in Colorado working as a university professor from September 1992 until the beginning of January 1993 (Finding 41). Thus, Anderson relies on the activities of Dr. Mizrahi and Dr. Erdogan for demonstrating reasonable diligence for the "critical period" (Paper 274 at 69-78).

Anderson argues that Drs. Erdogan and Mizrahi performed activities that were directly relevant to reducing the method of the count to practice (Paper 274 at 69). Those activities have been characterized by Anderson as follows: 1) work to obtain a phase mask, 2) studies of optical fiber photosensitivity and studies of grating growth, 3) work to optimize optical beams of grating growing equipment, and 4) work to maintain the same equipment (Paper 274 at 70).

The evidence in support of the activities that Anderson

directs us to, does not support Anderson's argument that the activities were directly related to reducing the count to practice. First, Anderson has failed to direct us to evidence that demonstrates that it was diligent in its activities to obtain or make a phase mask prior to 19 November 1992.

Anderson argues that a phase mask was not available to the inventors at the start of the critical period, citing to the declaration of Dr. Erdogan (Paper 274 at 71). Dr. Erdogan testified that his lab did not have a phase mask suitable for making bragg gratings (Finding 43). From this, we do not know what, if any, efforts were made to try to find a phase mask, or what attempts were made to make a phase mask. All we know is that Erdogan's lab did not have a phase mask.

Dr. Erdogan further states that he and Dr. Mizrahi researched several methods for making a phase mask. No dates or specific activities are given in connection to this statement. The only specific activities that Anderson directs us to regarding the making of a phase mask occurred from 19 November 1992 until 9 January 1992 (Paper 274 at 72). This does not explain what, if anything, the inventors were doing to obtain or make a phase mask prior to 19 November 1992¹².

¹² During oral argument, counsel for Anderson acknowledged that there were no activities by the inventors of obtaining a phase mask or making a phase mask prior to 19 November 1992. (Transcript at 9-10, lines 19-8).

From 8 September 1992 until 19 November 1992, there are approximately nine weeks during which time there are no specific activities towards obtaining a phase mask or making a phase mask. That Anderson failed to diligently seek to obtain or make a phase mask until well after the 8 September 1992 critical date is fatal to Anderson.

The count of this interference involves a method for fabricating a Bragg grating in the interior of an optical waveguide by: 1) disposing a phase grating mask adjacent and parallel to the optical waveguide and, 2) applying a single collimating light beam through the mask to the optical waveguide (Finding 6). Although the count requires essentially performing two steps with two elements, e.g. a phase mask and a single collimating light beam, Anderson fails to show activities of obtaining either a phase mask or experimenting with a single light beam¹³ until well after the beginning of the critical period.

In this light, Anderson takes the position that there were other related activities that the inventors did towards reducing the invention to practice, that occurred prior to 19 November 1992, e.g. the first attempt to obtain/make a phase mask, and

¹³ During oral argument, counsel for Anderson indicated that the Anderson inventors did not use a single collimating light beam until the inventors obtained a phase mask (Paper 324 at 20, lines 11-17).

after that time.

Those activities that Anderson argues are directly related to reducing the invention of the count prior to the end of November 1992 are directed to activities that apply generally to studying and experimenting with various ways to form Bragg gratings. Anderson has failed to direct us to sufficient evidence that would demonstrate that the other activities are directly related or precursors to reducing the invention to practice.

For example, Anderson argues that Drs. Erdogan and Mizrahi worked on studying photosensitivities and grating growth rates since they did not have a phase mask or knew they would only be able to obtain an inferior phase mask. Anderson argues that:

The studies of optical fiber photosensitivities were also proper diligence activity, because the studies identified fibers with high photosensitivity. The identification of fibers with high photosensitivities was relevant to reduction to practice of the count, because, Drs. Mizrahi and Erdogan, were unsuccessful at obtaining a phase mask suitable for practicing the count prior to January 8, 1993. Anderson Exh. 1031, pars. 31, Record pp. 0273-0274; Anderson Exh. 1032, pars. 18-19, pp. 0285-0286; Anderson Exh. 1034, pars. 19-21, Record p. 0299-300. The inventors believed that they might have to use a phase mask of low quality to reduce-to-practice the count. Anderson Exh. 1032, par. 9, Record p. 0280-0281; Anderson Exh. 1049, Record p.0821, line 18, to Record p. 0823, line 19. Of course, they could not be sure of the mask quality prior to a successful production of a phase mask. Furthermore, the inventors knew that low mask quality would interfere with successfully reducing-to-practice the count; if the optical fiber being written was not sufficiently photosensitive. Anderson Exh. 1032, par. 9, Record pp. 0280; Anderson Exh. 1049, Record p. 0822, line 1, to p. 0823, line 9. Thus, the inventors knew that a fiber with high photosensitivity could

compensate for the low mask quality and thus, would safeguard against failures associated with mask quality.
(Emphasis added) (Paper 274 at 73).

Anderson's argument is not persuasive for the following reasons. First, Anderson argues that Drs. Mizrahi and Erdogan studied fiber photosensitivity because they were unsuccessful at obtaining a phase mask. Several of the dates listed for studying photosensitivity and grating growth rates (Paper 274 at 74-75) are prior to the 19 November 1992 date when Anderson directs us to the first activity of trying to make or obtain a phase mask. Up until then, we do not know that the inventors were "unsuccessful at obtaining a phase mask" as argued by Anderson. The record does not support the argument that the inventors were unsuccessful. Rather, based on this record, Anderson has failed to sufficiently demonstrate that the inventors did anything, prior to 19 November 1992, towards obtaining or making a phase mask.

Anderson additionally argues that since the inventors knew that they would obtain a mask of low quality, that they would need to study the photosensitivity of fibers and that a fiber with high photosensitivity could compensate for a low mask quality. Anderson has failed to direct us to evidence that would demonstrate that the inventors tried to obtain or make a phase mask prior to 19 November 1992, or that they knew they would have to use a mask of low quality.

The evidence that Anderson does direct us to (e.g., AR 280-281; AR 821-823, lines 18-19) in support of its argument does not support that the inventors knew, at the time they did photosensitivity studies, that they might have to use a phase mask of low quality. For these additional reasons, Anderson has failed to establish that it was diligent during the critical time period.

Although not necessary to our decision, we also address Anderson's other activities that Anderson argues are directly relevant to practicing the count to practice. Those other activities are 1) work to optimize beams of grating writing equipment and 2) maintaining the grating writing equipment (Paper 274 at 75-78).

The grating writing equipment used by Drs. Erdogan and Mizrahi was an interferometer laser. The laser was used in the latter part of November 1992 in attempts to make a phase mask by etching a pattern in the mask using the laser. Prior to those activities, Anderson has failed to sufficiently demonstrate that the inventors used the laser to reduce the invention to practice.

The evidence that Anderson directs us to in support of its argument that the laser, and maintenance of such equipment, were used to reduce the invention to practice are directed to those events that occurred in the latter part of November 1992 for making a phase mask. Anderson fails to sufficiently explain how

the earlier listed dates (Paper 274 at 76) of using the interferometer or maintaining the interferometer were directly related to reducing the invention to practice.

Specifically, Anderson fails to direct us to sufficient evidence that would explain the experimental use of the grating writing equipment and maintenance thereof, as it applies to reducing the invention to practice.

The difficulty with Anderson's diligence case is that there is no demonstration, supported by sufficient evidence, that the inventors were performing all of the other tasks with the goal in mind of reducing the invention to practice. In April 1992, prior to Anderson's alleged conception, Dr. Mizrahi was interested in growing Bragg gratings in optical fibers by exposing the fibers to an interference pattern formed by overlapping two beams of ultraviolet light from an interferometer (AR 1-2, ¶ 4). It is not until 19 November 1992 that Mizrahi even mentions in his lab notebook entries of attempting to reduce the claimed invention to practice. Up to that point, there is not sufficient evidence that Mizrahi, or Erdogan were performing the "related activities" with the goal in mind of reducing the invention to practice. Anderson relies on attorney argument to assert that the inventors did perform the "related activities" with the goal in mind of reducing the invention to practice. However, argument by counsel cannot take the place of evidence lacking in the record.

The reasonable diligence standard "balances the interest in rewarding and encouraging invention with the public's interest in the earliest possible disclosure of innovation." Griffith v. Kanamaru, 816 F.2d 624, 626, 2 USPQ2d 1361, 1362 (Fed. Cir. 1987). Here, Anderson has failed to sufficiently demonstrate that it was reasonably diligent such as to provide the public with the earliest possible disclosure of its invention. Where the first to conceive has failed to demonstrate that it was reasonably diligent during the critical period, there is no reason, or justification, to allow it to prevail over another who is the second to conceive but who has made prompt disclosure by the filing of a patent application.

For all of the above reasons, Anderson has failed to sufficiently demonstrate by a preponderance of the evidence that it was prior to either Snitzer or Hill. Accordingly, judgment against Anderson is now appropriate.

Hill's case on priority

Actual Reduction to Practice

In order to establish an actual reduction to practice, the inventor must prove that: (1) an embodiment was constructed or a process was performed that met all the limitations of the interference count; and (2) that the invention would work for its intended purpose. Eaton v. Evans, 204 F.3d 1094, 1097, 53 USPQ2d 1696, 1698 (Fed. Cir. 2000). See also UMC Elecs. Co. v. United

States, 816 F.2d 647, 652, 2 USPQ2d 1465, 1468 (Fed. Cir. 1987); ("[T]here cannot be a reduction to practice of the invention . . . without a physical embodiment which includes all limitations of the claim.") (Emphasis added); and Corona Cord Tire Co. v. Dovan Chem. Corp., 276 U.S. 358, 383 (1928); (A process is reduced to practice when it is successfully performed. A machine is reduced to practice when it is assembled, adjusted and used. A manufacture is reduced to practice when it is completely manufactured. A composition of matter is reduced to practice when it is completely composed; quoted in Pfaff v. Wells Electronics, Inc., 119 S.Ct. 304, 307 n.2 (1998)). Corroboration of an actual reduction to practice is also required.

Hill's alleged actual reduction to practice fails for several reasons. First, the alleged actual reduction to practice was not actually reduced. The description of the Hill manuscript is not sufficient to demonstrate that the method of the count was actually performed. "Unlike the filing of a patent application, the publication of an article is not deemed a constructive reduction to practice of the subject matter described therein." In re Katz, 687 F.2d 450, 454, 215 USPQ 14, 17 (CCPA 1982).

Even further, Hill has failed to direct us to evidence of corroboration of the testing allegedly performed as described in the Hill manuscript. Lastly, Hill cannot rely on its activities in Canada to demonstrate an actual reduction to practice in the

United States. See Shurie v. Richmond, 699 F.2d 1156, 216 USPQ 1042 (Fed. Cir. 1983).

For these reasons, Hill has failed to sufficiently demonstrate that it actually reduced the invention to practice.

Diligence

Hill alternatively argues that it was diligent from the time of its conception, 8 September 1992 until the time the involved Hill application was filed, on 29 October 1992¹⁴. Hill need only show, however, that it was diligent from a time prior to Snitzer's 20 October 1992 filing until its 29 October 1992 filing. 35 U.S.C. § 102(g). The date of activity that Hill relies on that is prior to 20 October 1992 is 14 September 1992, when a letter was sent to Mr. Pascal, a patent agent, soliciting for a cost estimate for writing a patent application for the Hill invention. Hill directs us to no other evidence of acts of diligence from 14 September 1992 until its application is filed on 29 October 1992.

Hill argues that it is clear that the Hill patent application had to be prepared during the time period between 8

¹⁴ Neither Anderson nor Snitzer argue that the Hill manuscript fails to constitute a conception of the interfering subject matter. Snitzer, however, objects to the admissibility of the Hill manuscript, the receipt from the Annual Review Office, and the marked-up Hill manuscript. For reasons provided, infra, those documents are admissible. The Hill manuscript does describe the method of the count (Finding 48). Thus, Hill has proved, by a preponderance of the evidence, a prior conception of the interfering subject matter by 8 September 1992.

September 1992 and 29 October 1992 (Paper 272 at 42). Hill relies on Shindelar v. Holdeman, 628 F.2d 1337, 207 USPQ 112 (CCPA 1980) for the proposition that three months is considered a reasonable amount of time for preparing a patent application.

The facts here are distinguishable from those in Shindelar. The issue in Shindelar was whether a party had suppressed or concealed the invention after it had reduced the invention to practice. Here, the issue is diligence towards reducing an invention to practice, not whether an already reduced to practice invention has been concealed or suppressed. Hill has failed to discuss in any meaningful way why Shindelar applies to the issue of diligence.

Even if Shindelar should be considered with respect to the facts in this case, Shindelar does not stand for the proposition that three months to prepare an application is per se reasonable, when there is no evidence based on the record, to support a three month preparation time. In Shindelar, there was evidence of acts towards preparing the application. Here, there are none.

More relevant to the facts of this interference are D'Amico v. Koike, 347 F.2d 867, 146 USPQ 132 (CCPA 1965) and Bey v. Kollonitsch, 806 F.2d 1024, 1028, 231 USPQ 967, 970 (Fed. Cir. 1986). In D'Amico V. Koike, an unexplained one month period of time during the critical period was found to be excessive. In D'Amico, Judge Rich, speaking for the CCPA stated that:

We agree with the general principles which appellant seems to be advocating, namely, that a rule of reason should be followed in cases of this kind and that courts should be somewhat liberal in determinations of diligence of attorneys and of their clerical and stenographic staffs, since the law cannot presume that such people can immediately begin and expeditiously perform their duties as soon as work appears on their desks. Nevertheless we think that appellant is attempting to use those principles as substitutes for record evidence, of which there is very little.

As we view this appeal, appellant asks us to rule that even after a patent application is in draft form, with finished drawings, the acts of (1) considering and approving the application by a supervisory attorney, (2) final checking, (3) placing the approved and checked draft application in final form, and (4) preparing the formal papers for execution constitute "reasonable diligence," within the meaning of 35 U.S.C. § 102(g), if performed within a period of two months.

Obviously such a ruling must depend on a great number of circumstances such as, but not limited to, complexity of the invention, length of the application, detail of the drawings, experience, workload and availability of the attorney, availability of the draftsman and the inventor during the period involved, size of the attorney's staff, procedure and policy in reviewing the application, type and thoroughness of the review, number of people involved in preparing the application and their location, and the number of changes which the subject application underwent.

Certainly, evidence as to all these factors need not be of record; possibly evidence as to only one or two would suffice in certain cases. However, in the present appeal we know essentially nothing about the handling of the application during the two-month period except that (a) Breen did in fact "consider and approve" the application, and (b) the other work, i.e., checking, placing in final form, and preparing the formal papers, was done sometime. There is no end to the inferences which might be drawn from the scanty record before us and we prefer not to indulge in them, but we cannot overlook the fact that Koike's priority date falls nearly midway in this two-month period and it is certainly possible that all of D'Amico's activity took place during the period prior to October 29, whereupon the application lay idle for nearly one month awaiting execution

by the inventor. Be that as it may, that month is the critical month and the record contains no evidence, even of the weakest sort, whether in it anything occurred. (347 F.2d at 871, 146 USPQ at 135).

Like D'Amico, Hill provides little or no evidence as to what occurred during the period between 14 September 1992 and 29 October 1992. Hill fails to direct us to evidence that would even explain Mr. Pascal's activities.

Further, while the diligence law permits an attorney to work on his backlog and related cases, the law also specifies that "the attorney has the burden of keeping good records of the dates when cases are docketed as well as the dates when specific work is done on the applications." Bey v. Kollonitsch, 806 F.2d at 1028, 231 USPQ at 970. Here, no dates or records of Mr. Pascal's activities have been offered into evidence.

For these reasons, Hill has failed to demonstrate by a preponderance of the evidence that it was diligent during the critical period.

Hill's charge of derivation and Snitzer's prior conception

We begin our discussion with Snitzer's prior conception. A showing of prior conception by Snitzer will negate Hill's charge of derivation.

The Snitzer inventors arrived at the idea of disposing a periodic object mask adjacent and parallel to a photosensitive optical waveguide and applying a single collimating light beam

through the mask on 21 July 1992. The Snitzer inventors contemplated that "periodic object mask" included phase masks as well as amplitude masks (Finding 97).

Snitzer relies on its Invention Questionnaire, testimonial evidence of Dr. Rishton, and Dr. Stubbs and inventor testimony of Dr. Prohaska that he performed calculations on phase masks at the end of July 1992 to demonstrate independent corroboration of its conception (Paper 278 at 40).

Snitzer relies on the questionnaire to show all features of the count with the exception of a specific reference to using a phase mask. Snitzer relies on the testimonies of Drs. Stubbs and Rishton, along with activities of Dr. Prohaska to corroborate that the Snitzer inventors conceived of using a phase mask (Paper 278 at 44-45).

We begin our analysis by assessing the credibility of the testimony of Dr. Rishton. Snitzer relies on Rishton's testimony to corroborate the Snitzer inventors allegations that they had discussed with Rishton using a phase mask for forming Bragg gratings in late July 1992. Dr. Rishton's declaration and cross-examination testimony were taken some nine years after the events to which he testified. That this is a long time for a person to recollect events is exemplified by Dr. Rishton's inability to recall certain events that occurred during the same time period for which he testified (Findings 113-116).

Initially, during his cross examination, Dr. Rishton could not recall the term phase mask being mentioned to him during his meetings with Drs. Snitzer and Prohaska (Finding 111). Dr. Rishton recalled much later during his cross-examination testimony, that the term phase mask was discussed. Thus, there is a conflict in Dr. Rishton's testimony.

Hill argues that Dr. Rishton was confused about when the Snitzer inventors and he discussed phase masks. Apparently, there were subsequent discussions, after the alleged prior conception, between the Snitzer inventors and Dr. Rishton about Dr. Rishton making a phase mask. Dr. Rishton did eventually make a phase mask in 1993 for the Snitzer inventors (Finding 108). In support of Hill's argument that Dr. Rishton was confused, Hill directs us to Rishton's cross-examination, where Rishton states that during the initial conversation with Dr. Snitzer, that Dr. Snitzer had described phase masks "according to their calculations." However, according to Prohaska's testimony those calculations had not yet been made (Finding 117). According to Hill, Dr. Rishton's recollection may be based on a subsequent conversation he had with Dr. Snitzer regarding phase masks - a conversation that occurred after Snitzer's alleged July 1992 prior conception date.

Further, although Dr. Rishton routinely kept notes regarding meetings, the notes he kept for the initial discussions he had

with the Snitzer inventors only mention an amplitude mask and do not mention any discussion Rishton had with either Snitzer or Prohaska regarding a phase mask or the concept of a phase mask. That alone is not fatal to Snitzer, since oral corroboration of conception may by itself be sufficient. However, the lack of written documentation by Dr. Rishton, despite Snitzer's explanation that Dr. Rishton only recorded what was important to him, of phase mask or the concept of a phase mask during the initial conversation in late July 1992 supports the view that discussion of a phase mask did not occur in the initial conversation. We find that Dr. Rishton's testimony is not sufficiently credible to establish corroboration of the alleged conception.

Neither Dr. Rishton during cross-examination, nor party Snitzer sufficiently explain the noted conflicts in Dr. Rishton's cross-examination testimony. Snitzer, in its reply, argues that Dr. Rishton was initially referring to a class of grating masks and that his testimony was consistent in that he did not recall any other classes of masks being discussed (Paper 306 at 17). It is not evident that Dr. Rishton was referring only to a class of masks from his testimony. Dr. Rishton was asked specifically whether other terms beside grating masks were used by Dr. Snitzer or Dr. Prohaska during the initial conversation. Dr. Rishton testified that there were not (Finding 111). The question was

not whether other terms for classes of masks were used, but rather any "other terms".

Snitzer further argues that Hill's argument that Rishton was confused about when he discussed phase masks is without merit (Paper 306 at 11). Specifically, Snitzer argues that Hill's theory is inconsistent with Dr. Rishton's testimony that during the initial conversation with the Snitzer inventors both phase and amplitude masks were discussed, and with Dr. Rishton's recollection that he informed the Snitzer inventors that he could not make a phase mask since he did not have an established process for doing so.

Snitzer fails to provide a sufficient explanation for why Hill's theory is wrong. It is correct that Dr. Rishton testified that during the initial conversation the term phase mask was discussed. However, it is also true that Dr. Rishton later recalled that no other term was used to refer to the masks discussed, other than grating mask. Furthermore, Snitzer fails to provide a sufficient explanation for Rishton's testimony that his recollection of discussing phase masks was based on calculations on phase masks that the Snitzer inventors performed. The calculations, however were performed subsequent to the alleged conception date. As likely as it is that Dr. Rishton did discuss with the Snitzer inventors phase masks during the July 1992 meetings, it is equally as likely, based on this record,

that Rishton was confused about the timing of the conversations he had with the Snitzer inventors.

Under these circumstances, and while the matter may not be free from doubt, we find that Snitzer has failed to convincingly establish that Dr. Rishton's testimony, either alone or in combination with Drs. Prohaska's and Stubbs' testimony and the Invention Questionnaire, corroborate Snitzer's alleged conception.

Lacking from the record is sufficient credible testimony to permit us to accurately determine, as a matter of fact, that a phase mask, or the concept of a phase mask, was discussed during the initial conversations between Drs. Snitzer, Rishton, and Prohaska. While there is a possibility that a phase mask, or the concept of a phase mask was discussed, a possibility is not sufficient. Rather, a preponderance of the evidence must establish that a phase mask, or the concept of a phase mask was discussed during the initial meetings. A preponderance of the evidence is not based on mere possibilities.

Snitzer further relies on the uncorroborated oral testimony of inventor Dr. Prohaska to demonstrate that Dr. Prohaska performed phase mask calculations within about one to two weeks of 21 July 1992 (Paper 278 at 53). Snitzer fails to provide corroboration of the calculations. Note, inventor testimony must be corroborated. Cooper v. Goldfarb, 154 F.3d 1321, 1330, 47

USPQ2d 1896, 1903 (Fed. Cir. 1998).

Snitzer lastly relies on the testimony of Dr. Stubbs, the patent agent that prepared the Snitzer application. Snitzer argues that Dr. Stubbs corroborates the Snitzer inventors' conception of the invention by the end of July 1992 (Paper 278 at 54). On 30 July 1992, Dr. Stubbs met with Dr. Snitzer to discuss the Snitzer inventors' invention.

Dr. Stubbs testified that, based on a meeting with Dr. Snitzer on 30 July 1992, he believed that a mask having any form of periodic variation in optical properties was within the invention, whether they affected phase or amplitude of the transmitted light (Finding 126). Stubbs' belief does not establish corroboration of using a "phase grating mask" as recited in the count and as defined in this interference (Findings 10-18).

Snitzer is correct that conveyance of the precise terms of the count is not necessary to demonstrate conception. Rather, as Snitzer has pointed out, the subject matter defined by the count must be conveyed. In this interference, phase mask, or phase grating mask is a transparent mask having varying thickness across the mask, to vary the phase of the transmitted light (Finding 10). According to Stubbs, a mask that varies phase or amplitude is a part of the Snitzer invention. However, it has not been demonstrated that Stubbs understood that the inventors

actually contemplated using a phase grating mask, or the concept of a phase grating mask, e.g. a mask having varying thickness across the surface of the mask (Finding 10). Snitzer's disclosure to Dr. Stubbs could have been very generic without mentioning any specifics.

We are also not persuaded by Snitzer's argument that prior art that demonstrates that phase masks were known in 1984 as transmission gratings is consistent with Dr. Stubbs' understanding of the Snitzer's invention. That it might have been obvious to use known phase masks to vary phase is not the point. Snitzer has failed to demonstrate that Stubbs' understanding is the same as what the inventors had in mind.

In any event, we find Stubbs testimony not to be credible. Dr. Stubbs, in his declaration, testified that during the 30 July 1992 meeting, Dr. Snitzer made it clear to him that a mask having any form of periodic variation in optical properties was within the invention, including a mask that affected phase or amplitude. During cross-examination, however, Stubbs had no recollection of the discussions he had with Dr. Snitzer during that meeting (Finding 121). Notes taken during the meeting do not sufficiently describe the concept of a phase mask as defined in this interference (Snitzer Ex. 3034). Accordingly, Stubbs testimony is inconsistent and not reliable.

Snitzer argues that Stubbs lack of recollection of the precise term "phase mask" is not critical, since it is the conveyance of the concept that is important. However, as pointed out by party Anderson, Stubbs not only testified that he did not recall the specific term "phase mask" being used, he also had no recollection of the discussions he had with Dr. Snitzer during the 30 July 1992 meeting. Snitzer does not provide a sufficient explanation for Stubbs' inconsistent testimony. Thus, we do not credit Stubbs testimony that on 30 July 1992, he discussed with the Snitzer inventors a mask having any form of periodic variation in optical properties, including a mask that affected phase or amplitude.

For the above reasons, Snitzer has failed to establish corroboration of its alleged conception of the subject matter of the count.

Derivation is a question of fact. To prove derivation, the movant must establish prior conception of the claimed subject matter and communication of the conception to the adverse claimant. Price v. Symsek, 988 F.2d 1187, 1190, 26 USPQ2d 1031, 1033 (Fed. Cir. 1993).

It is well established that derivation is difficult to establish by direct evidence; it can generally only be established from the circumstances of a case. Barnet v. Wied, 195 F.2d 311, 93 USPQ 161 (CCPA 1952). Accordingly, all the

circumstances in the record must be considered in evaluating the sufficiency of the communication. Hedgewick v. Akers, 497 F.2d 905, 908, 182 USPQ 167, 169 (CCPA 1974).

Although there is no direct evidence that Elias Snitzer received and read the Hill manuscript, the facts before us present strong circumstantial evidence which support Hill's charge of derivation.

Dr. Snitzer was a guest editor for the Annual Review of Materials Science, Volume 23. In early April 1992, Dr. Snitzer invited Dr. Hill to write an article for the Review (Finding 65). Dr. Hill prepared a fax of an outline of the Hill manuscript to send to Dr. Snitzer, allegedly per the request of Dr. Snitzer. Around the same time, per Dr. Hill's testimony, Cooperman the production editor for the Review sent a letter to Dr. Hill confirming that he agreed to write an article for the Review. After which, also per Dr. Hill's testimony, Dr. Snitzer requested that the manuscript be sent directly to him. Dr. Hill further testified that in May of 1992, a second Cooperman letter was sent to Dr. Hill informing him that a copy of his manuscript should be sent directly to the Annual Review Office and not to the guest editors as either guest editor had previously requested (Finding 72).

The Hill manuscript was received by the office for the Review on 8 September 1992 (Findings 49 and 54). The Hill

manuscript describes all of the elements of the count. Although there is no direct evidence that Dr. Snitzer received the Hill manuscript, Cooperman testified that for the Volume 23, in the ordinary course of business, she sent copies of all manuscripts for keynote topics to each editor to be read (Findings 75 and 76). Cooperman further testified that a copy of each manuscript was sent to the guest editors immediately after the manuscript was received by the Annual Review Office (Finding 75).

Almost six weeks after the Annual Review Office received the Hill manuscript, the Snitzer inventors, on 17 October 1992, amended their '839 parent application by inserting an express reference to using a mask with periodic variation in phase for forming Bragg gratings in optical fibers. The Snitzer inventors testified that they were surprised when they initially read a draft of their '839 application and noticed that a reference to phase masks was not in the application contrary to Dr. Prohaska allegedly requesting that Dr. Stubbs, their patent agent, insert such a reference. Dr. Stubbs does not recall a conversation with Dr. Prohaska requesting to add an embodiment for a phase mask to the '839 application, or ever discussing phase masks with the Snitzer inventors (Findings 122 and 123). The single insert is the only description in '839 that refers to a "phase mask."

In the early part of 1993, Dr. Snitzer wrote and faxed an insert for the introduction for the Volume 23 (Finding 78). Even

though the insert does not describe the elements of the count, it does describe writing gratings in fibers and using optical fibers for communications and sensing. Thus, the insert describes the general subject matter of the Hill manuscript. Hill argues that the insert is further evidence that Dr. Snitzer had read the Hill manuscript contrary to Dr. Snitzer's testimony. Dr. Snitzer testified that he never read the Hill manuscript prior to or during the pendency of his '839 application, which issued well after the time he wrote the insert for the Volume 23 (Findings 87 and 88).

Snitzer's side of the story is as follows. Snitzer argues that Dr. Snitzer was very busy at the time he took on the role as guest editor for the Annual Review of Materials Science. Dr. Snitzer testified to this and testified that the late Dr. Laudise, the other guest editor for the Volume 23, performed almost all of the guest editing work (Findings 90 and 91).

Dr. Snitzer testified that in connection with his position as guest editor, he solicited authors, received two manuscripts (that Dr. Laudise sent to him specifically to review) and provided an insert for the introduction to the Volume 23. Snitzer further relies on the testimony of Mr. Wachtman, one of the associate editors for the volume. Wachtman testified that Dr. Snitzer was busy at the time Dr. Snitzer was guest editor for Volume 23, and that it was his opinion that Dr. Laudise took on a

strong interest in the Volume 23 and that Dr. Snitzer relied on Dr. Laudise for direction.

Dr. Snitzer further testified that he sent all pertinent information that pertained to the subject matter of his patent application to Dr. Stubbs and that he did not send him a copy of the Hill manuscript. He also testified that he searched his files and did not find a copy of the Hill manuscript.

We are not persuaded by Snitzer's explanations. First, we credit the testimony of Dr. Hill over that of Dr. Snitzer, since at least Cooperman corroborates portions of Dr. Hill's testimony. Further, Wachtman testified that it was his perception that Dr. Snitzer was busy at the time Dr. Snitzer was a guest editor. However, Wachtman's testimony is based on his opinion, not on first hand knowledge. That Dr. Snitzer appeared to be busy with duties outside of being a guest editor does not indicate that the Hill manuscript was never sent to him. Further, that Dr. Snitzer searched his files for a copy of the Hill manuscript is weighed in light of his testimony that he was not very good at keeping files (Finding 94). Dr. Snitzer's and Mr. Wachtman's testimony, when weighed against the circumstantial evidence that Hill has directed us to is not persuasive.

Snitzer attacks the credibility of Cooperman's testimony. Snitzer argues that since Cooperman dealt with numerous manuscripts, authors, editors, etc., during 1993, that she is

mistaken in her assumption of how the manuscripts for Volume 23 of the Review were handled (Paper 289 at 42). That Cooperman dealt with a large number of manuscripts, authors and editors does not, without more discredit Cooperman's testimony. Cooperman was consistent throughout her testimony. She testified that for Volume 23, a copy of each manuscript for the keynote topic was sent to each guest editor (Findings 75 and 76). Organizing and orchestrating each Volume was and still is (as of the date of her deposition and cross-examination testimony) Ms. Cooperman's job as production editor (Findings 52 and 53). As part of her job, Ms. Cooperman performs certain routine tasks. We are not persuaded that the sheer volume of information that Ms. Cooperman dealt with in 1993 discounts her consistent recollection of how manuscripts were handled for Volume 23.

Snitzer additionally argues that it was possible that Cooperman only sent one copy of the Hill manuscript to Dr. Laudise and not to Dr. Hill (Paper 289 at 41). Snitzer directs us to the Cooperman May 12, 1992 letter in which the letter indicates that one copy of the manuscript sent by Dr. Hill will be sent to the senior editors (Finding 73). Snitzer argues that the reference to "senior editors" in the letter was correct and even if it was supposed to be guest editors, that the letter indicates that only one copy was sent to the guest editors, and that it was likely that the one copy was sent to Dr. Laudise.

This, Snitzer argues, coupled with Cooperman's testimony that she would have only sent copies of manuscripts to Dr. Laudise, if he had so requested, evidences that Dr. Laudise received the Hill manuscript and not Dr. Snitzer.

Snitzer has moved to exclude the May 12, 1992 Cooperman letter. In our discussion that follows, we agree with Snitzer that the letter is hearsay and have excluded the letter from consideration. Thus, Snitzer cannot rely upon the letter in support of its theory. In any event, Snitzer's theory does not discredit or outweigh the testimony of Cooperman that during the regular course of business for the Volume 23, a copy of each manuscript was sent to each guest editor. We find the Cooperman testimony credible. Although Cooperman testified affirmatively that she would have only sent copies of the manuscript to Dr. Laudise, if he had so requested, there is no convincing evidence based on the record before us that indeed that is what happened. Cooperman testified specifically that she did not think that she had sent the Hill manuscript only to Dr. Laudise (Finding 77).

Snitzer argues that the insert that Dr. Snitzer wrote for the introduction of Volume 23 is a general overview of relevant topics in the field of fiber optics, and does not demonstrate that Dr. Snitzer read the Hill manuscript (Paper 289 at 45). While it may be true that the insert may refer to a general overview of relevant topics in the field of fiber optics, it is

at least

just as likely that the insert was written with knowledge of the Hill manuscript. Cooperman indicated that one of the reasons for sending the keynote manuscripts to the guest editors was for them to read the manuscripts in order to write an introduction for the volume (Finding 83). It is suspect that Snitzer would take on the task of writing a portion of an introduction for a publication without knowing what had been written. Snitzer's explanation to the contrary, in light of the evidence before us, is not persuasive.

In summary, although Dr. Snitzer denied ever reading or receiving the manuscript, based on the record, there is strong circumstantial evidence supporting Hill's charge of derivation.

The Annual Review Office received Hill's transcript on 8 September 1992. Cooperman testified that for Volume 23 a copy of each manuscript covering a keynote topic was sent to each guest editor. Her testimony is unwavering and credible. Dr. Snitzer wrote an insert for the introduction of Volume 23, describing generally the subject matter covered by the Hill manuscript, despite Dr. Snitzer's testimony that he never received or read Hill's manuscript. Cooperman testified that manuscripts are sent to each guest editor to be read in order to write an introduction. It is simply not credible that Snitzer would undertake writing a portion of an introduction to a compilation of articles without reading the relevant articles. The Snitzer

inventor's inserted a reference to using a "phase mask" in the '839 application approximately six weeks from when the office for the Review received the Hill manuscript and from when the manuscript was sent to the guest editors.

Snitzer has failed to provide a sufficient explanation for making the insertion in the '839 application without Snitzer's first having read the Hill manuscript. As stated above, in connection with Snitzer's alleged earlier conception, Snitzer has failed to sufficiently demonstrate that it conceived of the invention prior to 17 October 1992, when the Snitzer inventors amended their application. Snitzer's alleged prior conception and explanation for why the Snitzer inventors inserted the phase mask embodiment in their '839 application lack corroboration. The lack of a sufficient explanation for the insert in Snitzer's '839 application is further compelling evidence that tends to support Hill's charge of derivation.

Based on the record before us, Hill has sufficiently demonstrated by a preponderance of the evidence that Snitzer derived the invention of the count from party Hill. Snitzer has failed to demonstrate otherwise.

Snitzer's Miscellaneous Motion to Suppress Anderson's evidence

We find it unnecessary to consider the specific objections to the admissibility of Anderson's exhibits 1029-1031, 1033 and 1034, since Anderson has failed to demonstrate priority by a

preponderance of the evidence even assuming Anderson's exhibits 1029-1031, 1033 and 1034 to be admissible.

Accordingly, Snitzer's miscellaneous motion 10 to suppress is dismissed as moot.

Snitzer's Miscellaneous Motion to Suppress Hill's evidence

Snitzer moves to have certain ones of Hill's exhibits excluded from consideration (Finding 124). Hill exhibits 2008, 2030, 2046, Attachment I to 2046, Attachment II to 2046, 2057, 2059, and Anderson Ex. 1024 were apparently not relied upon by Hill to demonstrate conception and/or derivation, nor were they considered in rendering our decision regarding Hill's case of conception and/or derivation.

Furthermore, Hill's case of diligence was found not to be persuasive since Hill failed to sufficiently demonstrate acts of diligence from 8 September 1992 until 29 October 1992. Hill's demonstration of reduction to practice on 8 September 1992 was rejected, since Hill failed to demonstrate that the testing described in the Hill manuscript was actually performed, corroborated, and performed in the U.S.

Thus, we find it unnecessary to consider the specific objections to the admissibility of Hill's exhibits 2008, 2030, 2046, Attachment I to 2046, Attachment II to 2046, 2057, 2059, and Anderson Ex. 1024, since Hill has failed to demonstrate a prior reduction to practice or diligence by a preponderance of

the evidence even assuming Hill's exhibits 2008, 2030, 2046, Attachment I to 2046, Attachment II to 2046, 2057, 2059, and Anderson Ex. 1024 to be admissible for purposes of demonstrating diligence and an earlier reduction to practice.

Accordingly, Snitzer's motion with respect to Hill Ex. 2008, 2030, 2046, Attachment I to 2046, Attachment II to 2046, 2057, 2059, and Anderson Ex. 1024 is dismissed as moot.

Snitzer moves to exclude the Snitzer facsimile allegedly sent by Dr. Hill to Dr. Snitzer (Hill Ex. 2044, Attachment I to 2045, and references in Hill Ex. 2045 to such). Snitzer argues that the fax is hearsay, it includes handwritten marks, has not been properly authenticated, and no original is provided. Hill does not offer the fax into evidence to prove the truth of the matter asserted in the fax. Rather, Hill submits the fax into evidence to demonstrate that Dr. Snitzer was interested in Dr. Hill's work (Finding 69). Accordingly, the evidence is not hearsay.

Snitzer also challenges the authenticity of the fax. However, Hill testifies as to the authenticity of the fax, e.g. that it was a fax sent by him to Dr. Snitzer (HR 6, ¶ 5). No more is needed. Furthermore, the Federal Rules of Evidence allow a party to provide a copy of a document. See FRE 1003 (duplicates admissible to the same extent as originals). Accordingly, Snitzer's motion to exclude Hill exhibit 2044,

Attachment I to 2045, and references in Hill exhibit 2045 to such, is denied. With respect to Dr. Hill's testimony concerning what the fax demonstrates, e.g. what the contents of the fax mean, we have not considered those statements, since party Hill apparently does not rely upon them to prove conception. However, those statements made by Dr. Hill regarding his recollection of sending the fax are admissible.

Snitzer moves to exclude the April 1992 Cooperman letter and references thereto (Hill Ex. 2016, paragraph 3; Attachment I to 2016; Hill Ex. 2045, paragraphs referring to Attachment II of 2045, and Attachment II to 2045). Hill has failed to sufficiently address Snitzer's argument that Cooperman has failed to demonstrate that the letter falls within the business record exception. Accordingly, the letter is excluded. However, admissible is the statement made by Hill that he received the letter from Cooperman and the statement from Cooperman that the letter was from her to Dr. Hill.

Snitzer moves to exclude the May 1999 Cooperman letter and references thereto (Attachment VII to 2045 and portions of 2045). Hill fails to demonstrate that the May 1999 letter falls under a hearsay exception. Accordingly, the letter is excluded. Hill's declaration regarding the content of the letter has also not been considered. However, statements made by Hill that he received the letter from Cooperman are admissible. Furthermore, paragraph

29 of Hill exhibit 2045, is also excluded, since Hill's conclusions are based on the May 1999 Cooperman letter (HR 15, ¶ 29). Accordingly, Snitzer's motion to exclude Attachment VII of 2045 and paragraphs 28 and 29 of 2045 (HR 15) is granted.

Snitzer seeks to exclude the Hill manuscript receipt and references thereto (Hill exhibit 2016, paragraph 4, Attachment II to 2016, Attachment V to 2045, and paragraphs referring to Attachment V of 2045). Snitzer argues that the reference to and the copy of the receipt contain hearsay without a sufficient foundation to invoke any hearsay exception. The receipt and reference to the receipt fall within the business record exception.

Snitzer argues that Hill, in its opposition, failed to specifically cite to where in Cooperman's testimony it is provided that the Annual Review Receipt was kept in the course of a regularly conducted business activity (Paper 281 at 10). Hill, in its opposition specifically states that Cooperman's testimony (HR 270) and supplemental Cooperman declaration provide that explanation (Paper 293 at 9)..

Cooperman testified as to the specific steps she takes to date and stamp a manuscript received and that a receipt is stamped with the same date and sent to the author (HR 270-271). Cooperman further testified that the receipt was made as part of the usual activities of the Office of the Annual Review of

Materials Science (HR 221, ¶ 7 - the receipt "has my signature thereon, and is the type of receipt I sent out in the ordinary course of business when a manuscript was received"). Nothing more is needed. Accordingly the receipt and paragraphs of the declarations referring to such are admissible.

Snitzer moves to exclude the May 1992 Cooperman letter and references thereto (Attachment III to 2045 and portions of 2045) as being hearsay. While the letter is highly relevant and corroborates Hill's testimony that Dr. Snitzer had requested that the Hill manuscript be sent directly to Dr. Snitzer, the letter is hearsay and Hill has failed to demonstrate that it falls under a hearsay exception. Accordingly, the Cooperman May 1992 letter is inadmissible. Snitzer also argues that paragraph 16 of 2045 is hearsay with respect to the May 1992 letter. Dr. Hill's testimony attesting to what the letter says or what it means has not been considered. However, Dr. Hill's testimony that 1) he received the letter from Cooperman; and 2) that Elias Snitzer had requested that the manuscript be sent directly to him are admissible.

Snitzer seeks to exclude the Hill manuscript (Attachment IV to 2045) as containing hearsay. Hill relies on the manuscript to demonstrate conception of the invention. Dr. Hill testified as to the contents of the manuscript and that he and the other Hill inventors conceived of the invention as demonstrated by the

manuscript. Thus, Hill testified that he, along with the other Hill inventors conceived of the invention and that the manuscript describes the elements of the count.

We disagree that the Hill manuscript is hearsay. Hill is not relying on the manuscript for the truth of the matter asserted, e.g. that the contents of the manuscript are truthful. Rather, Hill is relying on the manuscript to show that the elements of the count were described. Thus, the document is not hearsay and therefore is admissible.

Snitzer seeks to exclude the marked up version of the Hill manuscript (Attachment VI to 2045). The marked up manuscript is not hearsay, since Hill does not rely on the contents of the manuscript for the truth of the matter asserted. Rather, Hill relies on the manuscript in support of its contention that once the office of the Annual Review receives a manuscript it marks the manuscript with the date in which the manuscript was received. Thus, Hill relies on the marked up manuscript for the 8 September 1992 date stamped on the front of the cover of the manuscript. Cooperman testified that in the ordinary course of business, that manuscripts are routinely date stamped upon their arrival (HR 270, lines 1-23). Thus, Cooperman establishes that the stamp on the front of the Hill manuscript was done in the ordinary course of business.

Snitzer additionally argues that the handwritten notations

added to the manuscript are illegible and as such the exhibit should be excluded. Hill is not relying on the handwritten notes in the manuscript. Accordingly, there was no occasion for Hill to have to properly authenticate the handwritten notes as Snitzer argues. For the above reasons, Snitzer's motion to exclude the marked up Hill manuscript is denied.

In its case for derivation, Hill relies on exhibit 2058 as a comparison between the introduction of Hill's manuscript and the insert prepared by Elias Snitzer for the introduction to Volume 23 of the Review. Hill relies on this document to demonstrate the similarities between the two documents, in support of its derivation case, e.g. that Snitzer had read the Hill manuscript prior to drafting the insert to the Volume 23 introduction contrary to Dr. Snitzer's allegations that he had not read or received the Hill manuscript. Snitzer objects to this evidence, since 1) the exhibit has not been authenticated; 2) no witness has testified to having personal knowledge of the drafting or highlighting of the document; and 3) it is irrelevant.

We find that the comparison is relevant to the issues raised by Hill in its case for derivation. Furthermore, we find it unnecessary for a witness to testify as to the drafting, highlighting or general preparation of Hill exhibit 2058. Here, Hill has explained what the document shows. The trier of fact

can look at the Hill manuscript and compare it with the insert made by Dr. Snitzer and see that Hill exhibit 2058 shows the two texts side-by-side. The trier of fact can also determine the similarities highlighted by Hill. Thus, the evidence is sufficient to support a finding that the matter in question is what its proponent claims. See Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1577, 38 USPQ2d 1288, 1291 (Fed. Cir. 1996) (stating that the trier of fact can conclude for itself what documents show). Therefore, Snitzer's motion to suppress Hill exhibit 2058 is denied.

Anderson's Miscellaneous Motion to Suppress Hill's Evidence

Anderson failed to attach its objections to its motion to suppress Hill's evidence. Accordingly, the motion is dismissed on that ground alone.

Even considering Anderson's motion on the merits, the motion is dismissed for the following reasons. Anderson moves to suppress Hill exhibit 2044, the facsimile that Hill allegedly sent to Elias Snitzer on 24 April 1992. Anderson's objections to this document and to the declarations of Dr. Hill testifying as to the content of the fax, are based on the document demonstrating prior conception. Hill has made it clear that it does not rely on the fax to establish an earlier date of conception, e.g. earlier than its 8 September 1992 conception. Rather, Hill has submitted Exhibit 2044 to demonstrate an

interest on the part of Elias Snitzer in Hill's work (Finding 69).

Anderson also objects to the admissibility of Hill exhibit 2045, paragraph 20, since Dr. Hill testifies that he made gratings with a phase mask by the spring of 1992. Hill does not rely on this statement to aver an earlier date of conception. Accordingly, we have not considered the exhibits 2044 or 2045 with respect to demonstrating a prior conception of 24 April 1992.

Accordingly, Anderson's motion to suppress Hill Exhibit 2044 and portions of Hill exhibit 2045 and 2048 is dismissed as moot.

D. Judgment

Based on our decision, it is

ORDERED that judgment as to Count 2 (Paper 209), the sole count in the interference, is awarded against junior party DANA Z. ANDERSON, TURAN ERDOGAN, and VICTOR MIZRAHI;

FURTHER ORDERED that junior party DANA Z. ANDERSON, TURAN ERDOGAN, and VICTOR MIZRAHI is not entitled to a patent containing claims 1, 2 and 5-8 (corresponding to Count 2) of U.S. Patent 5,327,515;

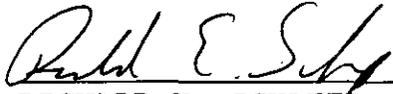
FURTHER ORDERED that judgment as to Count 2 (Paper 209), the sole count in the interference, is awarded against senior party ELIAS SNITZER, and JOHN D. PROHASKA:

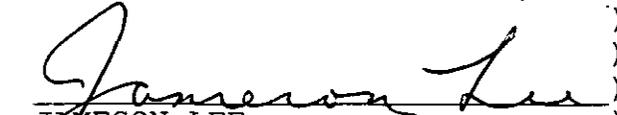
FURTHER ORDERED that senior party ELIAS SNITZER, and JOHN D.

PROHASKA is not entitled to a patent containing claims 11-23 and 25-30 (corresponding to Count 2) of application 08/310,426;

FURTHER ORDERED that a copy of this paper shall be made of record in the files of application 08/310,426, and U.S. Patent 5,327,515, and U.S. Patent 5,367,588;

FURTHER ORDERED that if there is a settlement agreement, attention is directed to 35 U.S.C. § 135(c) and 37 CFR § 1.661.


_____)
RICHARD E. SCHAFER)
Administrative Patent Judge)


_____)
JAMESON LEE)
Administrative Patent Judge)


_____)
SALLY C. MEDLEY)
Administrative Patent Judge)

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INTERFERENCES

cc (via federal express):

Counsel for party Anderson:

Joseph M. Skerpon
BANNER & WITCOFF, LTD.
1001 G Street, N.W.
Washington, D.C. 20001-4597

Tel: 202-508-9100
Fax: 202-508-9299

Counsel for party Hill:

Melvin Kraus
ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 North Seventeenth Street,
Suite 1800
Arlington, VA 22209

Tel: 703-312-6600
Fax: 703-312-6666

Counsel for party Snitzer:

George E. Quillin
FOLEY & LARDNER
3000 K. Street N.W.
Suite 500
Washington, D.C. 20007

Tel: 202-672-5413
Fax: 202-672-5399