

**United States Court of Appeals for the Federal Circuit**

00-1487

LORAL FAIRCHILD CORPORATION,

Plaintiff-Appellant,

v.

MATSUSHITA ELECTRICAL INDUSTRIAL COMPANY, LTD.,  
MATSUSHITA ELECTRIC CORPORATION OF AMERICA, CANON U.S.A., INC., CANON, INC.,  
FAIRCHILD SEMICONDUCTOR CORPORATION,  
FUJI PHOTO FILM CO., LTD., FUJI PHOTO FILM U.S.A., INC.,  
GOLD STAR ELECTRONIC INTERNATIONAL, GOLDSTAR CO., LTD.,  
HITACHI HOME ELECTRONICS (AMERICA), INC., HITACHI, LTD.,  
KOKOS COLOR TV, INC., MITSUBISHI ELECTRIC CORP.,  
MITSUBISHI ELECTRIC SALES AMERICA, INC.,  
NATIONAL SEMICONDUCTOR CORPORATION, NIPPON ELECTRIC COMPANY, LTD., and  
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants,

and

TOSHIBA CORPORATION, TOSHIBA AMERICA, INC.,  
TOSHIBA AMERICA CONSUMER PRODUCTS, INC.,  
TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC.,  
and TOSHIBA AMERICA INFORMATION SYSTEMS, INC.,

Defendants-Appellees,

and

NEC CORPORATION, NEC AMERICA, INC., and NEC TECHNOLOGIES, INC.,

Defendants-Appellees.

James H. Wallace, Jr., Wiley, Rein & Fielding, of Washington, DC, argued for plaintiff-appellant. With him on the brief were John B. Wyss and Gregory R. Lyons.

Arthur I. Neustadt, Oblon, Spivak, McClelland Maier & Neustadt, P.C., of Arlington, Virginia, argued for defendants-appellees, Toshiba Corporation, et al. With him on the brief were Richard D. Kelly and Carl E. Schlier.

John M. Calimafde, Hopgood, Calimafde, Judlowe & Mondolino, LLP, of New York, New York, argued for defendants-appellees NEC Corporation, et al.

Appealed from: United States District Court for the Eastern District of New York

Circuit Judge Randall R. Rader (Sitting by designation)

# United States Court of Appeals for the Federal Circuit

00-1487

LORAL FAIRCHILD CORPORATION,

Plaintiff-Appellant,

v.

MATSUSHITA ELECTRICAL INDUSTRIAL COMPANY, LTD.,  
MATSUSHITA ELECTRIC CORPORATION OF AMERICA, CANON U.S.A., INC., CANON, INC.,  
FAIRCHILD SEMICONDUCTOR CORPORATION,  
FUJI PHOTO FILM CO., LTD., FUJI PHOTO FILM U.S.A., INC.,  
GOLD STAR ELECTRONIC INTERNATIONAL, GOLDSTAR CO., LTD.,  
HITACHI HOME ELECTRONICS (AMERICA), INC., HITACHI, LTD.,  
KOKOS COLOR TV, INC., MITSUBISHI ELECTRIC CORP.,  
MITSUBISHI ELECTRIC SALES AMERICA, INC.,  
NATIONAL SEMICONDUCTOR CORPORATION, NIPPON ELECTRIC COMPANY, LTD., and  
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants,

and

TOSHIBA CORPORATION, TOSHIBA AMERICA, INC.,  
TOSHIBA AMERICA CONSUMER PRODUCTS, INC.,  
TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC.,  
and TOSHIBA AMERICA INFORMATION SYSTEMS, INC.,

Defendants-Appellees,

and

NEC CORPORATION, NEC AMERICA, INC., and NEC TECHNOLOGIES, INC.,

Defendants-Appellees.

---

DECIDED: September 21, 2001

---

Before MAYER, Chief Judge, NEWMAN, and MICHEL, Circuit Judges.

Opinion for the court filed by Circuit Judge MICHEL. Opinion concurring in the judgment filed by Circuit Judge NEWMAN.

MICHEL, Circuit Judge.

This appeal requires our determination of whether the patentee submitted sufficient evidence to preclude summary judgment of invalidity for obviousness over an article published prior to the filing date of the patent application. Oral argument was heard on July 12, 2001. Because we hold that the patentee raised a genuine issue as to whether its reduction to practice preceded the publication of the article, we reverse the grant of summary judgment and remand for further proceedings.

## BACKGROUND

In 1991, Loral sued numerous Japanese electronics manufacturers, and their U.S. distributors, for infringement of claim 1 of its United States Patent No. 3,931,674 (the '674 patent), which claims a process for manufacturing a charge-coupled device ("CCD"). A CCD is an important component in electronic cameras that produces an electrical signal representing the image that is focused upon it. This signal can then be processed and displayed on a video monitor. In August 1995, the district court severed and stayed Loral's claims against the non-manufacturing defendants, leaving six manufacturing defendants: Sony, Sanyo, Toshiba, Hitachi, NEC, and OKI. The court ordered separate trials for each.

Sony was the first and only defendant to go to trial. Over the course of five weeks in 1996, Loral and Sony tried the issues of validity and infringement to a jury. On February 14, 1996, the jury returned a verdict finding that Sony did not prove invalidity of the asserted claims, and that Loral had proven infringement under the doctrine of equivalents. Sony then moved for judgment as a matter of law ("JMOL") or, alternatively, for a new trial.

The district court granted Sony's motion for JMOL, holding that no reasonable jury could find that Sony infringed. See Loral Fairchild Corp. v. Victor Co. of Japan, 931 F. Supp. 1014 (E.D.N.Y. 1996) (Loral II). One basis for the court's decision was that Sony's accused process could not infringe under the doctrine of equivalents because it had been disclosed in a journal article authored by Dr. Darrel Erb ("the Erb reference") and published on December 3, 1973, prior to the

February 8, 1974 filing date of the application that issued as the '674 patent. Id. at 1030 (citing Wilson Sporting Goods Co. v. David Geoffrey & Assoc., 904 F.2d 677, 683-85, 14 USPQ2d 1942, 1948-49 (Fed. Cir. 1990) (patentee may not assert a range of equivalents for infringement purposes that includes the prior art)). Although the jury had returned a special verdict form indicating that it found that the Erb reference did not qualify as prior art against the '674 patent, the district court concluded that no reasonable jury could have done so. Loral II, 931 F. Supp. at 1031.

On appeal, we affirmed the grant of JMOL, but solely on the ground that Loral's allegations of infringement under the doctrine of equivalents were barred by prosecution history estoppel; our decision did not address whether the Erb reference is prior art with respect to the '674 patent. Loral Fairchild Corp. v. Victor Co. of Japan, 181 F.3d 1313, 1316 n.3, 50 USPQ2d 1865, 1876 n.3 (Fed. Cir. 1999) (Loral III). In response, Loral maintained its actions against only those of the remaining manufacturing defendants that it believed were literally infringing the '674 patent--Toshiba and NEC.

On April 10, 2000, Toshiba and NEC each moved for summary judgment that claim 1 is invalid as obvious in view of the Erb reference, which was asserted to be prior art under § 102(a). The district court held a two-day hearing on the motions. The court then issued a final judgment and an unpublished decision granting the motions, holding that there was no genuine issue as to the status of the Erb reference as prior art, and that claim 1 was obvious in light of it. Loral Fairchild Corp. v. Victor Co. of Japan, Nos. 92-0128 & 91-5056 (E.D.N.Y. June 21, 2000) (Toshiba I). Loral filed a timely notice of appeal, and we have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## DISCUSSION

Summary judgment is proper only when no "reasonable jury could return a verdict for the nonmoving party." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255, 106 S. Ct. 2505, 2510 (1986). In determining whether a genuine issue of material fact exists, the trial court must assume that the evidence presented by the non-movant is credible and draw all justifiable inferences

therefrom in the non-movant's favor. Id. at 255, 106 S. Ct. at 2513. Because of the statutory presumption of patent validity, 35 U.S.C. § 282, at trial Toshiba and NEC would bear the burden of proving by clear and convincing evidence that the Erb reference was published prior to Loral's reduction to practice. Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1578, 38 USPQ2d 1288, 1291 (Fed. Cir. 1996) ("Bard must persuade the trier of fact by clear and convincing evidence that the Cook catalog was published prior to Dr. Mahurkar's invention date."). Of course, Loral would bear a burden of production to present evidence of its asserted actual reduction to practice prior to the filing date of its patent application. Id. at 1576-77, 38 USPQ2d at 1290 ("Had Dr. Mahurkar not come forward with evidence of an earlier date of invention, the Cook catalog would have been anticipatory prior art under section 102(a) because Dr. Mahurkar's invention date would have been the filing date of his patent."). Because Loral does not argue for conception plus diligence to establish a date of invention prior to the publication date of the Erb article, but only an actual reduction to practice, we address only Loral's actual reduction to practice of the invention.

The proceedings in the Sony litigation are relevant to this appeal only because Toshiba and NEC relied exclusively upon evidence submitted during the Sony trial in support of their motions for summary judgment. Loral, however, relied upon both evidence submitted during the Sony trial and new evidence to oppose the motions. Critically, the district court applied neither issue preclusion nor collateral estoppel against Loral when ruling on the motions by Toshiba and NEC. Rather, the district court permissibly regarded its earlier findings on the prior art status of the Erb reference merely as a non-preclusive starting point, allowing the parties here both to submit new evidence and rely upon evidence submitted during the Sony trial. Toshiba I, slip op. at 9. The trial court's earlier findings are not law of the case and we do not understand the court to have so treated them when it ruled upon both the old and the new evidence.

In opposition to Toshiba's and NEC's motions for summary judgment, Loral argued both that the Erb reference does not render the asserted claim obvious and that it does not constitute prior

art. Loral submitted evidence that the inventor named in the '674 patent, Dr. Gilbert Amelio, conceived of the invention and actually reduced it to practice prior to the publication of the Erb reference. Dr. Amelio's conception of the invention prior to the publication of the Erb reference is not disputed. Thus, the critical question in this appeal is whether the evidence submitted by Loral was sufficient to raise a genuine issue as to whether Dr. Amelio's actual reduction to practice occurred prior to the publication of the Erb reference. If so, then the grant of summary judgment must be reversed.

I. The Evidence Relied Upon By Loral In Opposition to Summary Judgment

A. The Amelio Affidavit

Loral referred the district court to several items of evidence tending to indicate that the invention was actually reduced to practice prior to December 3, 1973. The only item not previously considered by the trial court during the Sony trial was an affidavit executed on April 14, 2000, by Dr. Amelio ("the Amelio affidavit") in which he states that the invention was reduced to practice shortly after September 14, 1973, but no later than mid-October 1973--when Loral "had initial production-quality devices." Because Dr. Amelio was employed by one of Loral's competitors during the Sony litigation, he was not available to testify at that time. He subsequently ended that employment, and was retained by Loral for the purpose of submitting an affidavit in this case.

The district court granted the motions for summary judgment, holding that "claim 1 of the '674 patent is obvious in light of the Erb reference, and therefore invalid." Toshiba I, slip op. at 12. In its opinion, the district court concluded that "Dr. Amelio claims no more than that he was 'working on reducing to practice' from June 1973 'through' mid-March 1974." Id. at 11. The Amelio affidavit, however, undermines that conclusion. In the affidavit, Dr. Amelio asserts a reduction to practice in September 1973, albeit with commercialization efforts continuing through mid-March 1974, stating (emphasis added):

I and those at Fairchild under my direction were diligently working on reducing to

practice and commercializing the '674 Process throughout the period of time from no later than June 1973 through the introduction of the commercial CCD110 product in mid-March 1974. No later than September 14, 1973, Fairchild produced working devices and established that the '674 Process would work for its intended purpose."

The underlined sentence was not addressed in the district court's opinion.

Once the invention has been shown to work for its intended purpose, reduction to practice is complete. Mahurkar, 79 F.3d at 1578, 38 USPQ2d at 1291. Further efforts to commercialize the invention are simply not relevant to determining whether a reference qualifies as prior art against the patented invention. The district court concluded that Loral's evidence was insufficient to avoid summary judgment because the Amelio affidavit contains "no statement asserting that he actually fabricated, and demonstrated by testing, the device claimed in the '674 patent before March 1974." Toshiba I, slip op. at 11. This conclusion is also not supported by the Amelio affidavit. The '674 patent claims a process for producing CCDs, and in his affidavit Dr. Amelio states that he and others at Loral had optimized the claimed process by making iterative changes to its parameters, and then evaluating each change by examining the CCDs produced. He further states that "by mid-October 1973, we had initial production-quality devices," i.e., the claimed process had been demonstrated to work for its intended purpose. Thus, in the Amelio affidavit the inventor alleged a reduction to practice prior to publication of the Erb reference. The court may not assess the credibility of testimony when granting summary judgment; thus to the extent that the district court assessed credibility in reaching its conclusions regarding the Amelio affidavit, those conclusions were improper. Thus, because the Amelio affidavit asserts reduction to practice prior to publication of the Erb reference, the issue then becomes whether Loral submitted independent evidence sufficient to corroborate this assertion.

B. Loral's Evidence to Corroborate the Amelio Affidavit

"In order to establish an actual reduction to practice, an inventor's testimony must be corroborated by independent evidence." Cooper v. Goldfarb, 154 F.3d 1321, 1330, 47 USPQ2d

1896, 1903 (Fed. Cir. 1998). The sufficiency of such corroborating evidence is evaluated under a "rule of reason," considering all of the pertinent evidence. Id. ("The rule requires an evaluation of all pertinent evidence when determining the credibility of an inventor's testimony. . . . In order to corroborate a reduction to practice, it is not necessary to produce an actual over-the-shoulder observer. Rather, sufficient circumstantial evidence of an independent nature can satisfy the corroboration requirement.").

To corroborate the Amelio affidavit, Loral relied, inter alia, upon evidence that had been presented during the Sony trial, including the trial testimony of one of Dr. Amelio's co-workers at Loral, Dr. David Wen. Dr. Wen had testified that Loral received custom-fabricated lithographic masks necessary for practicing the invention on or about September 14, 1973, the date stamped on the masks. Dr. Wen further testified that "as soon as we receive the masks, which are the stencils, we would actually start manufacturing the device." Loral also submitted copies of the actual masks, which had been submitted into evidence during the Sony trial.

Other than that of Dr. Wen, Loral offered no testimony to corroborate Dr. Amelio's alleged reduction to practice. Loral did, however, refer the court to other evidence that had been submitted during the Sony trial. In November 1973, Loral submitted to the United States Air Force a responsive proposal to provide CCDs produced using the claimed process. In the proposal, Loral stated that the claimed process "is already showing reliable performance and high yield." In his declaration, Amelio stated that he "was ultimately responsible for preparation of the Proposal and personally participated in its preparation." To bolster the credibility of the statement, however, Loral points out that the Air Force Proposal was prepared under a general statutory obligation of truthfulness. See 18 U.S.C. § 1001.

In Loral II, the district court afforded the lithographic masks little relevance: "At best, as recognized by [Loral's] Dr. Wen, the mask overlay set demonstrates [Loral] researchers had performed some design work. The overlays do not show that Dr. Amelio had run the process

claimed in the '674 patent and knew it would work for its intended purpose." Loral II, 931 F. Supp. at 1028. While we agree that, by themselves, the masks do not prove when the reduction to practice occurred, they were necessary for a reduction to practice and Dr. Wen testified that Loral possessed the masks beginning on or about September 14, 1973. Further, Dr. Wen testified that the masks support that Loral employees "had completed the design of the device and were about to begin manufacturing." This is entirely consistent with, and corroborates, the timing of the events constituting the reduction to practice alleged in the Amelio affidavit. It also gives rise to a reasonable inference, which must be made in favor of non-movant Loral, that on or about September 14, 1973, Loral began production efforts using the claimed process, with subsequent reduction to practice once process performance had been demonstrated. The Air Force Proposal indicates that process performance was established by November 1973, prior to publication of the Erb reference in December.

In Cooper, 154 F.3d at 1330, 47 USPQ2d at 1903, we held that reduction to practice had been proven by the inventor's testimony corroborated by testimony of his co-workers that he had told them of his reduction to practice, and that they had seen him obtain materials of the type necessary to practice the invention. We so held even though "no direct evidence supported Goldfarb's testimony that he measured fibril length and observed tissue ingrowth." Id. ("We agree with the Board that circumstantial evidence provided sufficient corroboration."); see also Lacotte v. Thomas, 758 F.2d 611, 613, 225 USPQ 633, 634 (Fed Cir. 1985) (affirming finding of reduction to practice, stating "[t]he testimony of Thomas, the inventor, and the written evidence of his reduction to practice in his notebook, are corroborated by independent circumstantial evidence of his withdrawal of supplies to practice the invention, as well as independent corroborating testimony of his associate, Lee.").

Here, Dr. Amelio's alleged reduction to practice, to be sure, is not corroborated by documentary evidence of test results confirming process performance. It is, however, corroborated

by the testimony of Dr. Wen, the delivery date of the masks necessary to practice the invention, and the Air Force Proposal. As in both Cooper and Lacotte, Loral has presented corroborating testimony by a co-worker of the inventor, and has demonstrated that material necessary to practice the invention was obtained prior to the alleged reduction to practice. And more, the district court's insistence upon "documentary evidence" to corroborate test results of Dr. Amelio's claimed reduction to practice was erroneous as a matter of law. Toshiba I, slip op. at 10 ("[T]o meet the corroboration requirement, Loral, at a minimum, would need to produce documentary evidence, such as signed laboratory notebooks or test results or activities to show priority." (emphasis added)). Under the "rule of reason," the inventor's testimony must be sufficiently corroborated by independent evidence, but not necessarily documentary evidence. Rather, "[t]he rule requires an evaluation of all pertinent evidence when determining the credibility of an inventor's testimony." Cooper, 154 F.3d at 1330, 47 USPQ2d at 1903 (emphasis added). Furthermore, it is not surprising that Loral has been unable to submit documents showing production test results, considering that the events at issue occurred almost 30 years ago.

To avoid summary judgment, Loral needed only to show that Dr. Amelio asserted reduction to practice prior to the publication of the Erb article, and to provide the corroborating evidence required under this court's precedent.<sup>1</sup> It did so.

---

<sup>1</sup> While Loral also argues that the research activities of Dr. Erb which culminated in the Erb reference do not qualify as prior art under § 102(g), it is not necessary for us to address this issue because the district court held only that the asserted claim was "obvious in light of the Erb reference." Toshiba I, slip op. at 12. Throughout the trial court's JMOL decision in the Sony case, the phrase "the Erb reference" is used to refer exclusively to the Erb publication, not the underlying research activities. See Loral II, 931 F. Supp. at 1027-31. In that same opinion, the phrase "the Erb work" is used to refer exclusively to the underlying research activities, and not the published article. Id. at 1031-34. In the decision on review in the instant appeal, the district court stated that "[t]his court previously found that the Erb reference, and the work underlying that article, antedates the '674 patent." Toshiba I, slip op. at 6 (emphasis added). Thus, it seems clear that the court held claim 1 invalid solely on the basis of the Erb article, applying it as prior art under § 102(a). Further, the issue of validity in view of the underlying research efforts by Dr. Erb, which might qualify as prior art under § 102(g), is nowhere addressed in the motions for, or opposition to, summary judgment submitted by the parties to the district court.

## CONCLUSION

In view of the evidence submitted by Loral, the grant of summary judgment was improper because that evidence raised a genuine issue as to whether those at Loral reduced the claimed invention to practice prior to the publication of the Erb article. Given that, we have no occasion to consider Loral's other arguments on appeal, including the correctness of the district court's conclusion that the claimed invention is obvious in view of the Erb reference. We therefore reverse the grant of summary judgment, and remand for further proceedings.

REVERSED AND REMANDED.

# United States Court of Appeals for the Federal Circuit

00-1487

LORAL FAIRCHILD CORPORATION,  
Plaintiff-Appellant,

v.

MATSUSHITA ELECTRICAL INDUSTRIAL COMPANY, LTD.,  
MATSUSHITA ELECTRIC CORPORATION OF AMERICA,  
CANON U.S.A., INC., CANON, INC.,  
FAIRCHILD SEMICONDUCTOR CORPORATION,  
FUJI PHOTO FILM CO., LTD., FUJI PHOTO FILM U.S.A., INC.,  
GOLD STAR ELECTRONIC INTERNATIONAL, GOLDSTAR CO., LTD.,  
HITACHI HOME ELECTRONICS (AMERICA), INC., HITACHI, LTD.,  
KOKOS COLOR TV, INC., MITSUBISHI ELECTRIC CORP.,  
MITSUBISHI ELECTRIC SALES AMERICA, INC.,  
NATIONAL SEMICONDUCTOR CORPORATION,  
NIPPON ELECTRIC COMPANY, LTD.,  
and SAMSUNG ELECTRONICS AMERICA, INC.,  
Defendants,

and

TOSHIBA CORPORATION, TOSHIBA AMERICA, INC.,  
TOSHIBA AMERICA CONSUMER PRODUCTS, INC.,  
TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC.,  
and TOSHIBA AMERICA INFORMATION SYSTEMS, INC.,  
Defendants-Appellees,

and

NEC CORPORATION, NEC AMERICA, INC., and NEC TECHNOLOGIES, INC.,  
Defendants-Appellees.

NEWMAN, Circuit Judge, concurring in the judgment.

I agree that it is appropriate to reverse the grant of summary judgment. I write separately lest the majority's opinion be taken as new law with respect to the requirements for antedating a publication that would otherwise be a reference under 35 U.S.C. §102.

***Antedating a Reference***

The court's opinion states that a reference can be antedated only by prior reduction to practice, stating: "Of course, Loral would bear the burden of production to present evidence of its asserted actual reduction to practice prior to the filing date of its patent application." The opinion also states that "at trial Toshiba and NEC would bear the burden of proving by clear and convincing evidence that the Erb reference was published prior to Loral's reduction to practice." However, the opinion correctly quotes precedent that the inventor "had to 'come forward with evidence of an earlier date of invention.'" The date of invention is the date of conception, not the date of reduction to practice. Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 60, 48 USPQ2d 1641, 1644 (1998) ("The primary meaning of the word 'invention' in the Patent Act unquestionably refers to the inventor's conception rather than to a physical embodiment of that idea."); Id., at 66, 48 USPQ2d at 1646 ("petitioner's argument . . . does not persuade us that it is necessary to engraft a reduction to practice element into the meaning of the term 'invention' as used in §102(b)"); Burroughs Wellcome Co. v. Barr Laboratories, Inc., 40 F.3d 1223, 1227-28, 32 USPQ2d 1915, 1919 (Fed. Cir. 1994) ("Conception is the touchstone of inventorship, the completion of the mental part of invention.")

Loral had to show that before the publication date of the Erb article the inventor, Dr. Amelio, had either a reduction to practice, or conception of the invention plus diligence to actual or constructive reduction to practice. This is well-established law, in the Patent Office as in the courts:

37 C.F.R. §1.131(b) The showing of facts shall be such , in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. . . .

The defendants readily concede that Dr. Amelio had conceived the patented invention before the publication date of the reference. Also, the evidence of activity constituting reduction to practice was not disputed by the defendants; their arguments were directed solely to the issues of corroboration and the position that the Erb date to be overcome was not the date of the article's publication but the date when the underlying work was conceived and done. The interest of clarity

of precedent, and efficiency on remand, require a more positive statement than has been made by my colleagues on this panel. Further, with the correction of the ruling that the work underlying the Erb article sets the date that must be antedated by Loral's reduction to practice, there is no longer a disputed issue of fact that requires resolution on remand.

### ***Corroboration***

The court sets requirements of corroboration of the inventor's testimony based on the law governing Patent Office interference practice, citing Cooper v. Goldfarb, 154 F.3d 1321, 47 USPQ2d 1896 (Fed. Cir. 1998) and Lacotte v. Thomas, 758 F.2d 611, 225 USPQ 633 (Fed. Cir. 1985), both PTO interferences, whose detailed and highly formalistic corroboration of the inventor's work is traditionally required in order to establish priority between competing inventors. That is not at issue here. Here the issue is solely a matter of antedating a publication, where the probative value of the inventor's testimony is as for any factual question: the weight and value of the evidence is determined, with due consideration to the issue to be decided as well as any contrary evidence and the burden of proof. The evidentiary standard for antedating a reference is not the same as the PTO requirement for establishing priority in an interference contest. Inventors' affidavits have always been admissible to antedate a reference. The regulations are explicit that evidence to antedate a reference may be provided by the inventor:

37 C.F.R. §1.131(a)(1) When any claim of an application or a patent under reexamination is rejected [on reference to] a printed publication, **the inventor** of the subject matter of the rejected claim . . . may submit an appropriate oath or declaration to overcome the patent or publication. The oath or declaration must include facts showing a completion of the invention in this country . . . before the date of the printed publication.

Antedating a reference is a common occurrence, governed by a stable and non-controversial jurisprudence. Let us not add uncertainties to this law.

### ***The 102(g) Issue***

The district court had required that Loral show an actual reduction to practice before the date of the underlying work of the Erb article, invoking §102(g). See Loral Fairchild Corp. v. Victor Co. of Japan, No. 92-0128 (E.D.N.Y., June 21, 200) slip op. at 8 ("This court, comparing the Erb work with the invention of the '674 patent, previously determined that the Erb work was prior art to the '674 patent."); id. ("Beyond its finding of a lack of diligence, however, this court also determined that Messrs. Erb and Su conceived the invention before Dr. Amelio, the inventor of the '674 patent. Thus, the Erb/Su conception date predated publication of their article by more than a year."); id. at 10 ("Loral has not proffered any new evidence to overcome this court's finding, based on earlier reduction to practice, that the Erb work was prior art under 35 U.S.C. §§102(a) and 102(g).") See also Loral Fairchild Corp. v. Victor Co. of Japan, 931 F. Supp. 1014, 1032 (E.D.N.Y. 1996) ("[T]he record shows that Drs. Erb and Su actually reduced their process to practice at the end of September 1973. . . . Because Dr. Amelio cannot show reasonable diligence from before this date to his filing date, the Erb/Su work stands as prior art.").

The record reflects a kind of inter partes interference proceeding with the authors of the Erb paper, who testified as to their work and when it was done. There is a specific statutory authorization for conducting an interference in the district court, but this does not apply when there is not an adverse claimant to a patent. Reliance on either the date of the Erb publication or the date of the work underlying the publication is mentioned in an ambiguous Footnote 1 in this court's opinion, which flags the issue but does not lay it to rest. Much mischief can flow if we open this door whereby a publication is effective as a reference as of the date the authors did the underlying work. It is our obligation, as the reviewing court, to act to assure clarity in the law.