

**THIS DOCUMENT IS NOT BINDING PRECEDENT OF THE BOARD**

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

Paper No. 293

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

JOSEPH E. LOUIS and ALAN W. JOHNSON

Junior Party  
(Patent No. 5,513,717)<sup>1</sup>

v.

HIDEAKI OKADA

Senior Party  
(Application 08/818,964)<sup>2</sup>

---

Patent Interference No. 104,311

---

**MEMORANDUM OPINION AND JUDGMENT**

---

<sup>1</sup> Based on application 08/181,983, filed January 14, 1994. The real party in interest is Sauer-Danfoss, Inc. ("Sauer"). Accorded the benefit of application 07/706,279, filed May 28, 1991; application 07/482,656, filed February 21, 1990; and application 07/319,164, filed March 3, 1989.

<sup>2</sup> Filed March 14, 1997. The real party in interest is Kanzaki Kokyukoki Mfg. Co., Ltd. ("Kanzaki"). Accorded the benefit of application 08/447,545, filed May 24, 1995; application 08/193,577, filed February 7, 1994; application 08/100,352, filed June 21, 1993; application 07/518,720, filed May 4, 1990; and application 07/304,581, filed February 1, 1989. Also accorded the benefit of Japanese applications 63-24193, filed February 3, 1988, 63-55828, filed March 9, 1988, 63-67005, filed March 18, 1988, and 63-79665, filed June 16, 1988.

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

Before SCHAFER, LEE and TORCZON, Administrative Patent Judges.

LEE, Administrative Patent Judge.

### Introduction

This is a decision on the issue of priority. As will be explained below, junior party Sauer has failed to demonstrate priority of invention. On even date herewith, and in a separate paper, we are granting Sauer's motion 20 for judgment under 35 U.S.C. § 102(f) against the sole claim, claim 7, of senior party Kanzaki Kokyukoki Mfg. Co., Ltd. ("Kanzaki") corresponding to the count. Entry of judgment against both parties is now appropriate.

### **Findings of Fact**

1. Eight related interferences, including this one, were declared on February 16, 2000, Interference Nos. 104,311 through 104,316 and 104,496 and 104,497.
2. The same Kanzaki application 08/818,964, is involved in each of the eight related interferences.
3. The involved Kanzaki application contains eight essentially copied claims 7-14, one from each of eight different issued patents of junior party Sauer.
4. Each of Sauer's eight different patents is involved in a separate interference with the same Kanzaki application.
5. In this interference, claim 7 is the only Kanzaki claim which corresponds to the count, and the corresponding copied Sauer claim, claim 1, is the only Sauer claim which corresponds to the count.

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

6. For efficiency purposes, the parties requested and the administrative patent judge approved that the parties would submit exhibits sufficient in number for only one interference and that papers in all related interferences would make reference to the same set of exhibits.

7. In this interference, the sole count is stated in the Notice Declaring Interference (Paper No. 1) as Sauer's claim 1 or Kanzaki's claim 7.

8. Sauer's claim 1 reads as follows:

An axle driving apparatus comprising:

a housing;

a hydrostatic transmission in said housing;

said hydrostatic transmission separate from said housing and mounted within said housing;

axle shafts extending from said housing;

said housing being defined by at least two separable housing elements of said axle driving apparatus, wherein said two elements are separable at a horizontal parting plane;

means on said hydrostatic transmission for fastening the hydrostatic transmission to one of said separable elements within said housing;

said hydrostatic transmission including cylinder blocks having their axes of rotation generally normal to each other.

9. Sauer has been accorded the benefit of the earlier filing dates of applications 07/706,279; 07/482,656; and 07/319,164. The earliest of such filing dates is March 3, 1989.

10. Kanzaki has been accorded benefit of the earlier filing dates of Japanese applications 63-24193; 63-55828; 63-67005; and 63-79665. The earliest of such filing dates is February 3, 1988.

11. On June 29, 1987, representatives from Sauer and representatives from Kanzaki had a personal meeting in the United States. At that meeting, it was generally agreed between the respective company representatives that the two parties will work jointly to develop a rear engine rider package including an IHT (integrated hydrostatic transmission). (Exhibit 2228; Exhibit 2411 ¶ 8; Exhibit 2412 ¶ 3; Exhibit 2413 ¶ 3; Exhibit 2407 ¶ 7).

12. It was also agreed during the June 29, 1987, meeting that Mr. Joseph Louis of Sauer and Mr. Koichiro Fujisaki of Kanzaki would be responsible for the conceptual design of the IHT. (Exhibit 2228; Exhibit 2411 ¶ 9; Exhibit 2412 ¶ 4; Exhibit 2413 ¶ 4; Exhibit 2407 ¶ 8).

13. Neither party represents that the agreement reached on June 29, 1987, to jointly develop a rear engine rider including an IHT was itself a binding contract with enforceable terms. Neither party represents that the agreement was in writing and neither party submitted a summary of each party's specific responsibilities, obligations, and commitments under the agreement. On page 44 of its brief, Sauer states that the parties were jointly developing an IHT pursuant to "what was going to be" a contractual joint venture. We find that the so called "agreement" was merely an intent to cooperate so long as either party saw fit to do so, with an eye toward possibly working out and executing an actual contract for joint venture at a later time.

14. From November 23, 1987, to November 25, 1987, Sauer and Kanzaki personnel met again in the United States, to get started on their "joint" development effort and determine what design would meet market and company requirements. See Exhibit 2232; Exhibit 2412 ¶ 8; Exhibit 2413 ¶ 7.

15. The November 23-25, 1987 meeting included a "brainstorming session" where the parties exchanged ideas regarding the concepts that they had developed prior to the meeting.

16. During the November 23-25, 1987 meeting, Sauer and Kanzaki together chose four design concepts to pursue and decided that the detailed investigation of the center section would be Sauer's responsibility. (Sauer and Kanzaki Fact 60)

17. Sauer's brief does not explain, specifically, what each of the four chosen concepts were. But the cited testimony of Mr. Fujisaki states (Exhibit 2454, page 27 lines 16-22):

At this time [referring to meeting notes of the November 23-25, 1987 meeting, Exhibit 2388] this concept which was selected was integrated design of housing and center section. However, if we are to have integral housing with center section, there are many difficult problems. Everybody realized those difficulties and in order to find solutions. What it means here is Sauer is going to take the lead to find a solution.

According to Sauer, and consistent with Mr. Fujisaki's testimony, during the November 23-25, 1987 meeting, the parties jointly decided that they would pursue an IHT having a center section that is integral to the housing as opposed to being separately mounted within the housing. (Sauer Facts 95 and 97)

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

18. According to Sauer, from November 26, 1987, to February 28, 1988, it worked on two of the four concepts marked for further study at the November 1987 meeting. Sauer admits that neither one of these concepts which it had worked on during that three month time period is within the scope of the count in this interference. (Br. at 24)

#### Discussion

Although argued by Sauer in its brief for final hearing, derivation of the invention of the count from Sauer by Kanzaki's named inventor was withdrawn as an issue in this case per the representation of Sauer's counsel during oral argument on May 29, 2002. See Transcript of Final hearing at 68 and 70. Accordingly, that issue is no longer before us.

Junior party Sauer does not allege that it reduced the invention of the count to practice prior to Kanzaki's accorded benefit date of February 3, 1988. Rather, it seeks to prevail on the issue of priority by asserting that it had a prior conception which is coupled with reasonable diligence from a time prior to conception of the invention by Kanzaki's inventor to Sauer's own reduction to practice. See 35 U.S.C. § 102(g).

"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). General allegations are insufficient to demonstrate reasonable diligence. Wiesner v. Weigert, 666 F.2d 582, 588-89, 212 USPQ 721, 727 (CCPA 1981). Evidence of diligence must be specific as to dates and facts. Kendall v. Searles, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949).

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

The diligence at issue is that for reducing the invention of the count to practice, not that in connection with unrelated activities or inventions, although sufficiently related activities may sometimes qualify as being directed to reducing the invention of the count to practice. Naber v. Cricchi, 567 F.2d 382, 385, 196 USPQ 294, 296 (CCPA 1977)("It is doubtless true that work quite unconnected with the reduction to practice cannot be considered. But whether particular work is sufficiently connected with the invention to be considered to be in the area of reducing it to practice must be determined in the light of the particular circumstances of the case which may be as varied as the mind of man can conceive."); see also Bey v. Kollonitsch, 806 F.2d 1024, 231 USPQ 967 (Fed. Cir. 1986).

Because Sauer's involved patent was at one time co-pending with Kanzaki's involved application, Sauer's burden of proof with regard to demonstrating priority is by a preponderance of the evidence. See e.g., Bruning v. Hirose, 161 F.3d 681, 684, 48 USPQ2d 1934, 1938 (Fed. Cir. 1998); Bosies v. Benedict, 27 F.3d 539, 541-42, 30 USPQ2d 1862, 1864 (Fed. Cir. 1994).

Sauer asserts that Mr. Joseph E. Louis and Mr. Alan W. Johnson had conceived of the invention of the count at the latest by November 23-25, 1987, the time of the technical meeting between Sauer and Kanzaki personnel, and had further actually reduced it to practice by August 17, 1988. However, from Sauer's alleged Facts 103-118, it is apparent that testing on the prototype apparatus assembled on August 17, 1988, did not commence until August 17, 1988, and evidently extended to sometime in October of 1988. Sauer's own technical expert, Mr. Staffan Kaempe, revealed in his testimony (Exhibit 2386, ¶15) that a part of the basis of his

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

opinion is that it took Sauer from November 1987 to October 1988 to design, build, and test an integrated hydrostatic transmission based on the design shown in Exhibit 2046. In that regard, note that to establish an actual reduction to practice, an inventor must prove that (1) he constructed an embodiment or performed a process that meets all the limitations of the interference count, and (2) he determined that the invention would work for its intended purpose. Cooper v. Goldfarb, 154 F.3d 1321, 1326, 47 USPQ2d 1896, 1900 (Fed. Cir. 1998). A reduction to practice does not occur until the inventor has determined that the invention will work for its intended purpose. Estee Lauder Inc. v. L'Oreal S.A., 129 F.3d 588, 593, 44 USPQ2d 1610, 1614 (Fed. Cir. 1997). Accordingly, Sauer did not actually reduce the invention to practice on August 17, 1988, and the earliest date of actual reduction to practice Sauer could have appears to be sometime in October of 1988. Although some inventions are so simple and their purpose and efficacy so obvious that their complete construction is sufficient to demonstrate workability, Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1578, 38 USPQ2d 1288, 1291 (Fed. Cir. 1996), Scott v. Finney, 34 F.3d 1058, 1061, 32 USPQ2d 1115, 1118 (Fed. Cir. 1994), Sauer does not contend and we do not find that the invention of the count of this interference is such a case.

In its opposition brief, Kanzaki does not seek to demonstrate a date of conception for the invention of the count prior to the date of its Japanese priority application, February 3, 1988. Therefore, Sauer's date of conception need only be prior to February 3, 1988, provided that there is a showing of reasonable diligence in reducing the invention to practice. Kanzaki disputes Sauer's assertion that Sauer had conceived of the invention of the count by November 23, 1987.

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

But we need not reach that question here, because even assuming that Sauer has a date of conception prior to February 3, 1988, and even further assuming that Sauer has an actual reduction to practice sometime in October of 1988, Sauer has failed to demonstrate reasonable diligence toward reduction to practice from a time just prior to February 3, 1988, to October, 1988.

In the fourth entry appearing in a chart on page 24 of its brief, Sauer specifically accounts for its activities in the period from 11/26/87 to 02/28/88. Also within that entry, Sauer admits that all the identified activities are directed to design concepts outside of the scope of the count. Sauer further does not allege that such activities outside of the scope of the count were somehow either required or necessary for constructing and/or testing an embodiment which is within the scope of the count. This gap, more than three weeks of which are within Sauer's critical period during which Sauer must have been reasonably diligent in reducing the invention to practice, renders unpersuasive Sauer's assertion that it had been reasonably diligent in the critical period for reducing the invention of the count to practice.

Sauer argues that during that initial gap, it was merely relying on agreements made with Kanzaki with regard to what it would work on subsequent to their technical meeting held from 11/23/87 to 11/25/87. The argument is without merit. That the parties together decided to direct their joint efforts to something outside of the scope of the count does not provide an excuse for either party to not be diligent in reducing the invention of the count to practice. Either for technical or business reasons or a combination of the two, and whatever is its motivation, Sauer

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

chose to pursue something outside of the scope of the count and has nothing to show for more than three weeks at the very beginning of the critical period for reducing to practice the invention of the count. Moreover, Sauer does not allege and it has not been demonstrated that the so called "agreement" between Sauer and Kanzaki precluded either party from separately engaging in the development of other design concepts independent of the other party. Sauer has not shown that during the initial period encompassing the three week gap it had any intention to reduce to practice an invention according to the count, let alone that during that time period it had diligently engaged in specific or meaningful activities toward reducing the invention of the count to practice.

At least on the record presented in this interference, if Sauer assumed that Kanzaki would not develop other concepts on its own, or that an eventual binding joint venture between them would necessarily occur which would incorporate any and all work Kanzaki had developed or would develop on the subject of integrated hydrostatic transaxles, that would appear to be very optimistic wishful thinking and Sauer would be making the assumption at its own risk. The risk is that Kanzaki would have conceived and filed a patent application which possibly was previously conceived by Sauer but for which Sauer had not been diligent toward reducing it to practice. That is the circumstance we now have.

Sauer further argues that because the normal time it takes to design, build, and test a new transmission is at least one year and because Sauer completed this task in only eleven months, it should be regarded as sufficiently reasonably diligent in reducing the invention to practice. The

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

argument is very much misplaced. The statutory provision of 35 U.S.C. § 102(g) concerns the reasonable "diligence" of one who is the first to conceive but last to reduce to practice, not how much faster one reduced the invention to practice, from beginning to end, as compared to an "industry norm" or as compared to anyone else. The term "diligence" pertains to the steady or dogged persistence with which a task is pursued, and not simply how quickly it is accomplished. from commencement to completion. "Diligence" is defined as follows in the Random House College Dictionary, Revised Edition (1982): "constant and earnest effort to accomplish what is undertaken." Note that all who are diligent do not necessarily complete the same task in the same amount of time. Some will complete the task quicker than others, depending on a myriad of relevant factors including the ingenuity and efficiency of the person and also the resources available to the person. Adopting Sauer's rationale, one would say that those who complete the task in less time than average are diligent and those who complete the task in more time than average are not diligent. Such conclusions are on their face irrational and incorrect.

Under the statute, a diligent inventor is not penalized for not being smart, for not being efficient, or for not being very good at what he or she does. So long as the inventor who first conceived of the invention diligently works on reducing the invention to practice, with no inexcusable gap during the critical period, and provided that the invention is ultimately reduced to practice, he or she is entitled to prevail on priority over another who earlier reduced the invention to practice. An inventor may take one year to reduce an invention to practice and be regarded as diligent; another inventor may take 18 months to reduce the same invention to

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

practice and be regarded as diligent; and still another inventor may take two years to reduce the same invention to practice and be regarded as diligent. Diligence is directed to continuous, steady, or constant effort, and not necessarily to any quick result.

Sauer has not cited to any authority, and we are aware of none, that supports its position that diligence is a measure of how quickly, in absolute measure of time, one reduce an invention to practice, as compared to some "norm." In contrast, we note that quoting from a Sixth Circuit opinion from 1893, the Court of Appeals for the Federal Circuit, in Mahurkar v. C.R. Bard Inc., 79 F.3d 1572, 1577, 38 USPQ2d 1288, 1290 (Fed. Cir. 1996), stated:

[T]he person "who first conceives, and, in a mental sense, first invents, . . . may date his patentable invention back to the time of its conception, if he connects the conception with its reduction to practice by reasonable diligence on his part, **so that they are substantially one continuous act.**" (Emphasis added.)

For the foregoing reasons, continuity of steadfast effort is the linchpin for determining the presence of reasonable diligence. With the un-excused gap of more than three months from November 25, 1987 to February 28, 1988, more than three weeks of which are within the critical period commencing from February 3, 1988, Sauer has failed to show the necessary reasonable diligence. In its reply, Sauer argues that the public's interest was protected because despite the initial gap, it still completed reduction to practice in a short period of time. We disagree. Had there not been this three month gap, more than three weeks of which is in Sauer's critical period, Sauer most likely could have reduced the invention to practice earlier. In any event, as already

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

explained above, the issue at hand is not the overall completion time, but whether there had been steadfast and continuous effort sufficient to constitute reasonable diligence. Here, there was not.

Furthermore, it is also questionable how Sauer can group all "transmissions" together as having a "normal" time period for design, construction, and testing. The basis is not articulated. Indeed, much depends on the particular features embodied in the specific transmission being reduced to practice. An adequate time for one transmission may not be adequate for another transmission, and an inadequate time for one transmission may well be adequate for another. Sauer's witness, Mr. Staffan Kaempe testifies in his declaration in ¶ 14: "Based on my experience as General Manager, I believe that the normal time period that it takes to design, build, and test a brand name transmission is at least one year." That testimony is not very meaningful since not all brand name transmissions are necessarily of the same level of complexity.

According to Kanzaki, even for times subsequent to February 28, 1988, Sauer has not shown reasonable diligence in reducing the invention of the count to practice. However, we need not address that issue because even assuming that Sauer was reasonably diligent subsequent to February 28, 1988, that diligence did not commence prior to Kanzaki's effective filing date of February 3, 1988. At the very most, any diligence on the part of Sauer commenced on February 29, 1988, and that is not prior to Kanzaki's date of conception as is required by 35 U.S.C. § 102(g) for any entitlement by Sauer to priority of invention relative to Kanzaki.

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

For the foregoing reasons, Sauer has not satisfied its burden of proof in demonstrating priority of invention over Kanzaki.

We note that Kanzaki has argued that Sauer had derived the invention of the count from Kanzaki. That issue is moot in light of Sauer's failure to demonstrate reasonable diligence in reducing the invention to practice, even assuming that Sauer had a prior conception.

**Judgment**

It is

**ORDERED** that judgment as to the subject matter of the count is herein entered against junior party JOSEPH E. LOUIS and ALAN W. JOHNSON;

**FURTHER ORDERED** that junior party JOSEPH E. LOUIS and ALAN W. JOHNSON is not entitled to its involved patent claim 1 which corresponds to the count;

**FURTHER ORDERED** that senior party HIDEAKI OKADA is not entitled to claim 7 of its involved application, which corresponds to the count;

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

Interference No. 104,311  
Sauer Inc. v. Kanzaki Kokyukoki Mfg. Co., Ltd.

**FURTHER ORDERED** that a copy of this paper will be entered in each party's involved application or patent.

Richard E. Schafer	)	
Administrative Patent Judge	)	
	)	BOARD OF PATENT
Jameson Lee	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
Richard Torczon	)	
Administrative Patent Judge	)	

Counsel for Junior Party: Charles L. Gholz, Esq., Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

Counsel for Senior Party: Edward J. Kessler, Esq., Steme, Kessler, Goldstein & Fox P.L.L.C.