

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YASUHIRO YAMAUCHI, KAN OGATA, NAOKI SHINDO,
NOBUHIRO HOKAO, YOSHIHIKO TSUCHIYAMA, MASAKAZU TATEISHI,
and TADATSUGU FUKUZUMI

Appeal No. 2002-1102
Application No. 09/329,591

ON BRIEF

Before KIMLIN, GARRIS, and PAWLIKOWSKI, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the refusal of the examiner to allow claims 10, 13-17 and 20. These are all of the claims remaining in the application. On page 2 of the brief, the

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appellants state that they "hereby cancel Claim 20."¹ We will treat this statement as a withdrawal of claim 20 from the subject appeal. As a consequence, only claims 10 and 13-17 remain before us on this appeal.

The subject matter on appeal relates to a PCB decomposing apparatus comprising a primary reactor, a secondary reactor, pH detecting means, sodium hydroxide supply means and control means for controlling an amount of sodium hydroxide to be supplied corresponding to a pH value detected by the pH detecting means. Further details of this appealed subject matter are set forth in representative independent claim 10 which reads as follows:

10. A PCB decomposing apparatus comprising:

a PCB extracting container for extracting PCB from a PCB containing material with an organic solvent;

a distilling tower for distilling an extracted solution introduced from the PCB extracting container, thereby separating the PCB from the organic solvent;

a primary reactor including a container for receiving a PCB-containing fluid separated from the distilling tower, a nozzle for introducing aqueous sodium carbonate solution into the container for decomposing the PCB, and a nozzle for introducing an oxidizing agent;

¹ This attempt by the appellants to cancel claim 20 has not been effective since the claim cancellation should have been filed as a separate paper rather than as part of the brief. See 37 CFR § 1.4(c)(2001). Also see the Manual of Patent Examining Procedure (MPEP) § 1207 (8th ed., Aug. 2001).

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a secondary reactor having a bent conduit to increase a moving distance of the fluid and serving to further decompose unreacted PCB contained in the fluid introduced from the primary reactor in the conduit;

a gas-liquid separator for separating, from the fluid, carbon dioxide contained in the fluid introduced from the secondary reactor;

means for separating the unreacted PCB flowing out of the primary reactor and the deposited sodium carbonate, thereby returning the sodium carbonate to the primary reactor, said means for separating the unreacted PCB and the deposited sodium carbonate comprising a cyclone separator, the cyclone separator being caused to communicate with an oxidizing agent supply path in the primary reactor, thereby promoting separation in the cyclone separator and return of the separated sodium carbonate to the primary reactor by the flow of the oxidizing agent;

pH detecting means for measuring pH of at least one of the primary reactor and the secondary reactor;

sodium hydroxide supply means for supplying sodium hydroxide to the reactor including the pH detecting means; and

control means for controlling an amount of sodium hydroxide to be supplied corresponding to a pH value detected by the pH detecting means.

The prior art set forth below is relied upon by the examiner as evidence of obviousness:

Dickinson	4,714,032	Dec. 22, 1987
Swallow et al. (Swallow)	5,232,604	Aug. 3, 1993
Chen et al. (Chen)	5,324,439	Jun. 28, 1994
McBrayer, Jr. et al. (McBrayer)	5,755,974	May 26, 1998
		(filed Mar. 3, 1995)

The admitted prior art described in the subject specification and shown in Figure 10 of the appellants' drawing.

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Claims 10 and 13-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Swallow, Dickinson, McBrayer and Chen.

We refer to the brief and to the answer for a thorough discussion of the opposing viewpoints expressed by the appellants and by the examiner concerning the above noted rejection.

OPINION

We cannot sustain this rejection.

The examiner recognizes that the admitted prior art fails to show the here claimed pH detecting means, sodium hydroxide supply means and control means. However, it is the examiner's position that "McBrayer teaches a pH detecting means, a NaOH supply means and a control means" and that "[i]t would have been obvious to one skilled in the art at the time of invention to modify the admitted prior art as modified above to include a pH monitoring system" (answer, page 5). According to the examiner, "[a]n ordinarily skilled artist would be motivated to do the foregoing to control corrosion within the reactor system" (answer, page 5). We cannot agree.

As correctly argued by the appellants, McBrayer contains no teaching or suggestion concerning a PCB decomposing apparatus of the type here claimed or of the type shown in Figure 10 of the

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appellants' drawing as admitted prior art. Instead, McBrayer relates to a method and apparatus for reacting oxidizable material with a salt at temperatures and pressures that are in the vicinity of supercritical conditions for water.

Therefore, while McBrayer does indeed disclose a pH detecting means, sodium hydroxide supply means and control means for ameliorating corrosion problems in his apparatus, no basis exists for concluding that an artisan with ordinary skill would have considered this disclosure applicable to the PCB decomposing apparatus of the admitted prior art. Stated otherwise, no basis exists for believing that the admitted prior art apparatus for decomposing PCB suffers from corrosion problems of the type disclosed and solved by McBrayer in the context of his entirely disparate apparatus for reacting oxidizable matter with a salt. Even if the admitted prior art apparatus were assumed to suffer from some type of corrosion problem, no basis exists for believing that this problem would have been solved with the same means and in the same way which McBrayer found to be appropriate for his different apparatus.

Under these circumstances, we can only assume that the examiner, in proposing to combine the applied prior art in the manner discussed above, has fallen victim "to the insidious

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effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W. L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It follows that we cannot sustain the examiner's section 103 rejection of claims 10 and 13-17 as being unpatentable over the admitted prior art, Swallow, Dickinson, McBrayer and Chen.²

The decision of the examiner is reversed.

REVERSED

Edward C. Kimlin)	
Administrative Patent Judge)	
)	
)	
)	
Bradley R. Garris)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Beverly A. Pawlikowski)	
Administrative Patent Judge)	

BRG:tdl

² In light of our disposition of this appeal, no need exists for discussing the Swallow, Dickinson and Chen references or the examiner's obviousness conclusion with respect thereto.

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