

## FEDERAL CIRCUIT PATENT LAW CASE UPDATE

Union Carbide v. Shell Oil, 04-1475 (Fed. Cir. Oct. 3, 2005) (Rader, J.)

While agreeing with the infringement judgment below, the court held that the district court under-determined damages for Shell's infringement of Union Carbide's catalyst patent. Shell's exports of the catalyst under 35 U.S.C. § 271(f) should have been included in the damages calculation.

Union Carbide owns U.S. Pat. No. 4,916,243.

[T]he '243 patent claims improved silver catalysts for the commercial production of EO. . . . EO gas is used primarily in the industrial production of ethylene glycol, which is used, in turn, to produce polyester fiber, resin and film. . . . The '243 patent claims a process for the production of EO with a greater decrease in the reaction temperature than processes using pure silver catalysts. Thus, this new process reduces the formation of oxygen and water byproducts and increases the efficiency of the reaction. . . . Claim 4, the sole claim at issue in the present appeal, concerns a process involving a catalyst including silver, cesium and lithium.

The court found the record sufficient to support Union Carbide's infringement case below, and turned back Shell's various arguments as to the sufficiency of the evidence. For example:

In its final non-infringement argument, Shell asserts that Union Carbide did not test Shell's catalysts in the same ethylene production system as used by Shell, thus lacking evidence of infringement of this claim limitation. Rather, Professor Haller conducted his tests in one EO production system that was representative of all of Shell's 69 accused processes (i.e., an approximation of the entire set of processes that does not match any one particular Shell process). Shell argues this "representative" testing is inadequate because representative testing was disclaimed during

prosecution and does not "define" Shell's system as required by the district court's jury instructions. . . . Because the claim does not require an exact match to the accused processes, Union Carbide had only an obligation to show that its test parameters sufficiently covered the range of conditions in each of the 69 accused commercial processes. . . . Even Shell uses a single representative set of experimental conditions to test their commercial catalysts' efficiencies and warrant these catalysts based on those laboratory tests, not based on individual tests for each of their 69 processes.

For the damages issue, the court agreed with Union Carbide that the district court erred by concluding that § 271(f) "is not directed to process claims."

This case again questions the meaning of the phrase "any component of a patented invention" in the statute. In other words, does this phrase apply to components used in the performance of patented process/method inventions? Eolas Techs. v. Microsoft Corp., 399 F.3d 1325, 1339 (Fed. Cir. 2005) recently answered this question in the affirmative, holding that every component of every form of invention deserves the protection of 35 U.S.C. § 271(f); i.e., that "components" and "patented inventions" under § 271(f) are not limited to physical machines. . . . [T]he statute makes no distinction between patentable method/process inventions and other forms of patentable inventions.

