

FEDERAL CIRCUIT PATENT LAW CASE UPDATE

Curtiss-Wright Flow Control, Corp. v. Velan, Inc., 05-1373 (Fed. Cir. Feb. 15, 2006) (Rader, J.)

Disagreeing with the construction of the term “adjustable,” the court vacated Curtiss-Wright’s preliminary injunction against Velan based on Curtiss-Wright’s patent for a system and method to “de-head” a coke drum (a large piece of machinery used in the process of recovering materials from spent oil refinery byproducts). De-heading is in essence the process of emptying the drum by removing or opening the “head.” The claimed de-heading system had an “adjustable” mechanism to vary the pressure applied to the head apparatus. The district court overly broadened the claim term “adjustable.” The claimed invention never contemplated removing the head apparatus. In Velan’s system, the head apparatus was removable. Thus, Velan’s system was adjustable in a way not covered by the proper construction of the term.

Curtiss-Wright owns U.S. Patent No. 6,565,714, claiming a “system and a method that de-heads [a] coke drum without manually removing the heads.” The coke drum is used to recover product from residual oils after refining.

A typical coke drum might be 120 feet high and 30 feet in diameter with openings at the top and bottom. These openings have large, flanged metal plates known as “heads.” . . . Coke drums are very hot and the heads can weigh four tons. . . . [T]he de-heading system of the ’714 patent includes a dual seated, linear motion, blind gate valve, i.e., a “de-header valve.” . . . The upper and lower seats have aligned circular openings that make a single hole at, for example, the bottom of the coke drum. The blind moves linearly, horizontally between the two seats to open and close the hole at the base of the coke drum.

A key to the technology is an adjustment mechanism that allows the upper seat to retain a tight seal with the drum, but still allow the blind to move in light of the downward force bearing on the upper seal.

Velan’s accused infringing device “do not include adjustment mechanisms like those disclosed in the ’714 patent. Instead, Velan’s valves include upper dynamic, live loaded seats with internal biasing springs. These springs modulate the pressure on the seat to allow the blind to move.” Velan’s system envisions removal of the valves and the biasing springs from the coke drum.

According to the trial court, the term “adjustable” in claim 14 means that the bias force on the live loaded seat can be changed in a manner that is “not limited by any time,

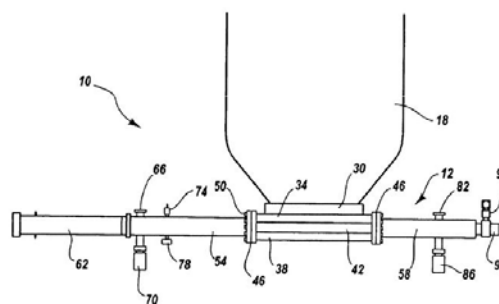


Fig. 2

place, manner, or means of adjustment.” . . . Based on that construction, the trial court concluded that Curtiss-Wright had shown a reasonable likelihood of success on the merits of its infringement claim. . . . The trial court observed that Velan can “adjust” the bias force by replacing the springs in its de-header valve. . . . After further considering irreparable harm, the balance of hardships, and the public interest, the district court granted Curtiss-Wright’s motion for a preliminary injunction.

The court found the construction logical in approach, but in error because it was both too broad and not grounded in the specification.

While logical, this chain of reasoning errs because it places too much emphasis on the ordinary meaning of “adjustable” without adequate grounding of that term within the context of the specification of the ’714 patent. Moreover, to the extent this reasoning relies on claim differentiation, it misapplies that limited tool of claim construction. . . .

[T]he patent stresses that adjustment occurs during operation and without removal of the head unit. . . .

Thus, the specification of the '714 patent consistently, and without exception, describes adjustment that occurs during operation of the de-header system. The district court's construction of "adjustable," which includes a structure that requires dismantling of the valve to perform the adjustment, finds no support in the overall context of the '714 patent specification.

The court noted the difficulties of the claim differentiation doctrine.

In the most specific sense, "claim differentiation" refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. . . . Thus, the claim differentiation tool works best in the relationship between independent and dependent claims. . . . Beyond the independent/dependent claim scenario, this court has characterized claim differentiation more generally, i.e., as the "presumption that each claim in a patent has a different scope." . . . Indeed this court has acknowledged that two claims with different terminology can define the exact same subject matter. . . . In this context, this court has cautioned that "[c]laim differentiation is a guide, not a rigid rule." . . .

With those precedents in mind, this court observes that two considerations generally govern this claim construction tool when applied to two independent claims: (1) claim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent claim superfluous; and (2) claim differentiation "can not broaden claims beyond their correct scope." . . .

In this case, both of those considerations weigh against the district court's construction of "adjustable."