

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

KOKI HOLDINGS CO., LTD.,

Plaintiff,

v.

KYOCERA SENCO INDUSTRIAL  
TOOLS, INC.,

Defendant.

Civil Action No. 18-313-CFC

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**MEMORANDUM ORDER**

Plaintiff Koki Holdings Co., Ltd. has requested that I construe the terms “cross-sectional area of the main valve control channel” in claim 1 of U.S. Patent No. 7,156,012 (the #012 patent)<sup>1</sup> and “cross-sectional area of the first channel” in claims 1 and 10 of U.S. Patent No. 7,398,647 (the #647 patent). D.I. 141 at 1. Defendant Kyocera Senco Industrial Tools, Inc. does not oppose Koki’s request. D.I. 141 at 1.

Claim 1 of the #012 patent recites

[a] fastener driving tool comprising:

...

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<sup>1</sup> The term is also found in claims 2, 3, and 4 of the #012 patent, but I recently found those claims invalid for indefiniteness. D.I. 194.

a main valve chamber section defining therein a main valve chamber in which the main valve is movably disposed, the main valve chamber providing a maximum internal volume;

...

A main valve control channel section defining therein a main valve control channel that provides a fluid connection between the main valve chamber and the trigger valve, the main valve control channel having a cross-sectional area, a ratio obtained from dividing the maximum internal volume of the main valve chamber measured in  $m^3$  by *the cross-sectional area of the main valve control channel* measured in  $m^2$  being not more than 1.0

(emphasis added).

Claim 1 of the #647 patent recites

[a] fastener driving tool comprising:

...

a main valve section disposed in the frame and having a main valve movable between a top dead center and a bottom dead center to alternatively open a block fluid communication between the piston upper chamber and the accumulator, a main valve chamber being defined by an upper surface of the main valve and a part of the frame;

...

a first channel providing a fluid communication between the main valve chamber and the trigger valve section;

...

wherein a ratio obtained from dividing a maximum internal volume of the main valve chamber measured in  $m^3$  by *a cross sectional area of the first channel* measured in  $m^2$  is no greater than 0.8

(emphasis added).

Koki contends that “the cross-sectional area of the first [or main valve control] channel” means the cross-sectional area of a *single* channel. D.I. 141 at 4; D.I. 176 at 2. Kyocera contends that the disputed terms mean the cross-sectional area of *one or more* channels. D.I. 162 at 20. In other words, Koki argues that the contested terms require that the ratio limitation recited in the claims be calculated using the cross-sectional area of only a single channel. D.I. 176 at 2. And Kyocera argues that the recited ratio is calculated using a cross-sectional area of one or more channels.

There is an actual dispute concerning the meaning of the identified terms, and accordingly I will construe them. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). The parties set forth their views on the construction of the contested terms in their summary judgment briefing. *See* D.I. 137 at 12–17; D.I. 162 at 15–20; D.I. 176 at 2–7.

In my view, the language of the claims supports Koki’s proposed construction. The preposition “of” in the term “the cross-sectional area of the main valve control channel” correlates the claimed “cross-sectional area” with “the main valve control channel” (singular) *not with* “the main valve control channels” (plural). Similarly, “of” in the term “a cross-sectional area of the first channel” correlates the claimed “cross-sectional area” with “the first channel” (singular) *not with* “the first channels” (plural). Nothing in the claim language suggests that the

claimed cross-sectional area is to be calculated by adding together numerous cross-sectional areas of numerous channels.

Kyocera argues that the Federal Circuit “has repeatedly emphasized that an indefinite article “a” or “an” in patent parlance carries the meaning of “one or more” in open-ended claims containing the transitional phrase “comprising,” D.I. 162 at 15 (quoting *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000)), and that the earlier references in the claims to “*a* first channel” and “*a* main valve control channel” must therefore mean that there are “one or more” channels, *id.* But this argument misses the point. It is undisputed that there can be more than one “first channel,” more than one “main valve control channel,” and even more than one “cross-sectional area.” What the parties dispute is the correlation between the claimed cross-sectional areas and the claimed channels. The use of the prepositional phrase “of the” followed by the singular “channel” in the disputed terms makes clear that each and any cross-sectional area is to be calculated separately for each and any channel.

The written description shared by the #012 and #647 discloses only exemplary non-limiting embodiments that are not inconsistent with either of the constructions proposed by the parties. Accordingly, it does not aid in construing in the construction analysis.

NOW THEREFORE, at Wilmington this Twenty-sixth day of March in 2021, **IT IS HEREBY ORDERED** that “cross-sectional area of the main valve control channel” in U.S. Patent No. 7,156,012 means “cross-sectional area of a single main valve control channel” and **IT IS FURTHER ORDERED** that “cross-sectional area of the first channel” in U.S. Patent No. 7,398,647 means “cross-sectional area of a single first channel.”

  
UNITED STATES DISTRICT JUDGE