

**Legal Opinions with respect to the Patent Disputes between
Convergence Technologies Ltd. (CTL) and
Taiwan Microloops Corp. (Microloops)**

Prepared by Rich IP & Co.
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Provided by Rich IP & Corp.

A. Case Status

1. Civil Action:

- (1) CTL (plaintiff) filed a civil action against Microloops (defendant) with the Taiwan Intellectual Property Court (Case No.: 97 Min Zhuan Su 18) in Taiwan on September 9, 2008 for the patent infringement. CTL claimed monetary damages NT.1.5 million (about \$42,850) as the minimum compensation and seek for an injunction. From the complaint, the accused product was Microloops' Vapor Chamber used in Sapphire HD 3870, which was accused infringing on plaintiff's Taiwan patent No. I293361 ('361 patent) and Taiwan patent No. I281017 ('017 patent).
- (2) Until now, CTL has not yet provided any sophisticated and qualified patent infringement assessment report to support its accusation. CTL neither construed the claims of the '361 and the '017 patents nor analyzed the characteristics of the Microloops' vapor chamber in detail. Besides, CTL has not gone through the all-element analysis and has not analyzed the reverse doctrine of equivalents, wherein the above two analysis procedures are stipulated by the Patent Infringement Assessment and widely followed in Taiwan as well as around the world. Moreover, CTL's comparison report was not issued by any independent and professional patent infringement assessment institute and thus, insufficient to prove the infringement.
- (3) At the court hearing on March 9, 2009, the judge asked CTL to specify the evidence to support the accusation of the patent infringement and to specify the infringing products at issue so as to proceed with the trial. CTL responded the court that they do not have the formal assessment report at hand and request the court to extend one month for preparation. After CTL specifies the evidence and the accused products, Microloops and will review them and provide defenses for invalidity issue and non-infringement issue.
- (4) For the invalidity issue, it seems that all of technical characteristics of the '361 and '017 patents have been disclosed by the prior arts and thus shall be

invalidated. We will present all of the prior art evidences to the court and request the court to dismiss CTL's claims based on the Paragraph 2, Article 16 of the Intellectual Property Case Adjudication Act. Our prior art reference are as follows:

- i. ANTHONY F. MILLS., Heat Transfer, pp.674-75, 1992
- ii. US Patent No. 6,082,443, published on July 4, 2000.
- iii. US Patent No. 4,489,777, published on December 25, 1984.
- iv. US Patent No. 3,754,594, published on August 28, 1973.
- v. US Patent No. 4,170,262, published on October 9, 1979.

2. Invalidation Action:

In addition to our invalidity defense in the Civil Action, we also raised two cancellation actions against the '361 and '017 patents separately with the Taiwan Intellectual Property Office (TIPO) so as to permanently revoke these two invalid patents. The case statuses are as follows

(1) For '361 patent: Case No. 92113098N01

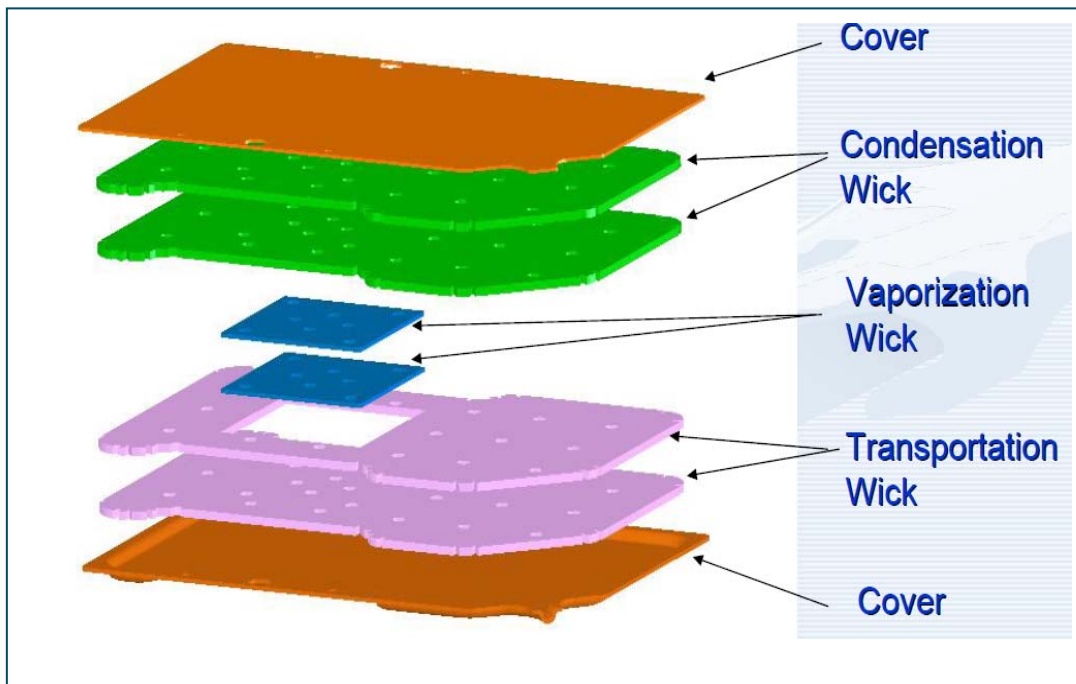
We filed a cancellation action (Case No. 92113098N01) to revoke CTL's '361 patent with the TIPO on September 3, 2008 based on the prior art references, US.6,082,443 and US.4,489,777 patents as our evidence. We also supplements two prior art references, US 3,754,594 and US 4,170,262 to reinforce our assertion.

(2) For '017 patent: Case No. 94141881N01

We filed a cancellation action (Case No. 94141881N01) to revoke CTL' '017 patent with the TIPO on December 17, 2008 based on the prior references US.6,082,443 and US.4,489,777 patents as our evidence.

B. The Infringement Analysis of Microloops' Current Wick Structure:

1. Microloops' current wick structure:



2. There is no sufficient evidence to support that Microloops' current wick structure falls into the claim scope of US.7,422,053 ('053 Patent):

(1) Claim Construction:

Claim 1 of the '053 Patent includes the following technical characteristics:

- i. a heat transfer device
- ii. at least one chamber
- iii. condensable fluid
- iv. an evaporation region configured to be coupled to a heat source for vaporizing the condensable fluid
- v. a condensation region comprising condensation surfaces configured to permit the vaporized condensable fluid to collect as condensate
- vi. wherein the at least one chamber is configured to cause the condensate to

flow through increasingly less area in the vicinity of the evaporation region , giving rise to a converging flow condition as the condensate approaches the evaporation region

- vii. a **multi-wick structure** comprising a plurality of hydraulically interconnected wick structures extending from the evaporation region into the condensation region for facilitating flow of the condensate toward the evaporation region, wherein a **wicking power of the multi-wick structure increases with decreasing flow distance to the evaporation region to facilitate an increased flow rate of the condensate as the condensate approaches the evaporation region.**

(2) Element vii of Claim 1 of the '053 patent cannot be clearly read on Microloops' current wick structure for the following reasons:

- i. Microloops' current wick structure do not have the technical feature that wicking power of the wick structure increases with decreasing flow distance to the evaporation region.
- ii. In addition, there is no evidence that the flow rate has been increased.

(3) Summary: There is in sufficient evidence to support that Microloops' current wick structure falls into the claim scope of the '053 patent.

3. **There is no sufficient evidence to support that Microloops' current wick structure falls into the claim scope of CN. ZL03816747.6 ('747 patent):**

(1) Claim Construction:

Claim 1 of the '747 Patent includes the following technical characteristics:

- i. a heat transfer device
- ii. at least one chamber
- iii. condensable fluid
- iv. an evaporation region configured to be coupled to a heat source for vaporizing the condensable fluid
- v. a condensation region comprising condensation surfaces configured to

permit the vaporized condensable fluid to collect as condensate

- vi. a **multi-wick structure** comprising a plurality of interconnected wick structures for facilitating flow of the condensate toward the evaporation region, wherein a **wicking power of the multi-wick structure increases with decreasing flow distance to the evaporation region to facilitate an increased flow rate of the condensate as the condensate approaches the evaporation region.**

(2) Element vi of Claim 1 of the '747 patent cannot be clearly read on Microloops' current wick structure for the following reasons:

- i. Microloops' current wick structure do not have the technical feature that wicking power of the wick structure increases with decreasing flow distance to the evaporation region.
- ii. In addition, there is no evidence that the flow rate has been increased.

Summary: There is insufficient evidence to support that Microloops' current wick structure falls into the claim scope of the '747 patent.



Alan Chen

Patent Attorney

Rich IP & Co.