

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ZHENWEN FU, LOUIS CHRISTOPHER GRAZIANO,
MICHAEL PAUL HALLDEN-ABBERTON,
GEORGE MAX LEIN, WAYNE DEVONPORT,
and ERIC GUSTAVE LUNDQUIST

Appeal 2007-4536
Application 10/462,110
Technology Center 1700

Decided: March 27, 2008

Before EDWARD C. KIMLIN, PETER F. KRATZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

Statement of the Case

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1, 3, 7-10, and 12-15. Claim 2 stands allowed. We have jurisdiction under 35 U.S.C. § 6. Representative claim 1, as presented in Appellants' Brief, is reproduced below:

1. An inkjet ink composition comprising a liquid medium, a colorant and an aqueous binder composition comprising polymeric nanoparticles ("PNPs") having a mean diameter in the range of 1 to 10 nanometers, the PNPs comprising as polymerized units 1-20%, by weight based on dry polymer weight, of one or more curable monomers which are unreactive at ambient conditions and are capable of being initiated themally, chemically or via actinic radiation, wherein the PNPs include as polymerized units at least one multiethylenically unsaturated monomer and at least one water soluble monomer and wherein the preparation of the aqueous binder composition does not use surfactants.

The Examiner relies on the following references in rejecting the appealed subject matter:

Amick	U.S. 2003/0232918	Dec. 18, 2003
Devonport	U.S. 2003/0232914	Dec. 18, 2003

- I. Claims 1, 3, 7-10, 12-13 and 15 stand rejected under 35 U.S.C. § 102(e) as anticipated by Amick.
- II. Claims 1, 3, 7-10, 12-15 stand rejected under 35 U.S.C. § 102(e) as anticipated by Devonport.

Appellants' arguments regarding the rejections over Amick and Devonport are directed to claim 1. Appellants do not present separate arguments for claims 3, 7-10, and 12-15. Accordingly, for each rejection all the rejected claims will stand or fall together with claim 1.

We have thoroughly reviewed each of the arguments advanced by Appellants. However, we are in complete agreement with the Examiner's reasoned analysis and application of the prior art.

Appellants' invention relates to an inkjet ink composition comprising a liquid medium, a colorant, and an aqueous binder composition. The aqueous binder composition comprises polymeric nanoparticles having a mean diameter in the range of 1 to 10 nanometers and comprising 1-20% by weight polymerized units of one or more curable monomers. The curable monomers are unreactive at ambient conditions and are capable of being initiated thermally, chemically or via actinic radiation. The aqueous binder composition does not use surfactants during preparation.

Appellants maintain that Amick and Devonport both do not provide details as to how one would formulate an inkjet ink, what ratios of polymer particles would be required and what other components will be required in the inkjet ink. (Br. 4 and 5). Appellants also maintain that “[w]ithout undue experimentation one skilled in the art would not know how to formulate an inkjet ink of the present invention based on the disclosure of Amick [and Devonport].” (Br. 5).

The object of the inventions of Amick and Devonport is to provide aqueous nanoparticles dispersions and compositions containing the same. Appellants have not argued that the aqueous nanoparticles dispersions of both Amick and Devonport are not the same as the aqueous binder as specified in claims 1.

The Specification establishes that persons of ordinary skill in the art recognized the suitability of incorporating small particle size polymer latex systems in inkjet printing. Specifically the Specification states:

Ink jet printing is a well established technique for applying an ink to a substrate to form an image, in which there is no physical contact between the functional part of the printer from which the ink is applied and the substrate onto which the ink is deposited. The ink is applied in the form of micro-droplets, which are projected by well known means through small nozzles in the print head onto the substrate.

O.Y. Tian . . . discloses small particle size polymer latex systems in ink jet printing on textile substrates, including "curing" to evaporate water and form an integrated polymer film. (Specification 1)

Amick describes the aqueous compositions comprising polymeric nanoparticles and the suitability of utilizing these compositions in inkjet printing. (Amick [0098]).

Devonport describes the aqueous compositions comprising polymeric nanoparticles and the suitability of utilizing these compositions in ink printing materials. (See for example Devonport [0002]).

To anticipate, a reference must sufficiently describe the claimed invention to have placed the invention in the possession of the public. *See Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1572 (Fed. Cir. 1992).

We determine that the present record establishes that persons of ordinary skill in the art recognize the suitability of utilizing aqueous compositions comprising small polymeric particles in inkjet compositions. Amick and Devonport place a person of ordinary skill in the art in the possession of inkjet compositions comprising aqueous nanoparticles dispersions.

It is recognized that the claimed invention is directed to a composition comprising a liquid medium, a colorant and an aqueous binder. Appellants have not asserted that Amick and Devonport do not each disclose these components. As such, Appellants have not argued a compositional distinction between the claimed invention and the inventions of Amick and Devonport. Appellants have not argued that a person of ordinary skill in the art would not have known the components that are conventionally utilized in inkjet inks. We do not agree with Appellants' criticism of the Amick and Devonport references for failing to provide details as to how one would formulate an inkjet ink, and Appellants have not established that one of ordinary skill in the relevant art is unable to do so. Appellants are attempting to establish patentability based on components that have not been recited in the claimed invention. That is, Appellants have not claimed the ratios of polymer particles that are required and have not specified the other components that are required in an inkjet ink.¹

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims is affirmed.

¹ If we were to agree with Appellants' arguments that Amick and Devonport would require undue experimentation for a person of ordinary skill in the art to formulate an inkjet ink, the presently claimed invention would suffer from the same defect.

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ORDER

The rejection of claims 1, 3, 7-10, 12-13, and 15 under 35 U.S.C. § 102(e) as anticipated by Amick is AFFIRMED. The rejection of claim 1, 3, 7-10, 12-15 under 35 U.S.C. § 102(e) as anticipated by Devonport is AFFIRMED

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

PL Initials
sld

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