UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UMICORE AG & CO. KG

Petitioner

v.

BASF CORPORATION

Patent Owner

Case IPR2015-01121 U.S. Patent 7,601,662

PETITIONER'S REPLY BRIEF IN SUPPORT OF ITS PETITION FOR *INTER*PARTES REVIEW

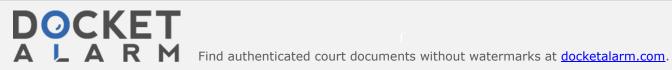


TABLE OF CONTENTS

| IN' | rc | DDUC | CTION | 1 | | |
|------|---|-------------|--|----|--|--|
| AR | GU | MEN | VT | 1 | | |
| I. | BASF'S IMPROPER FOCUS ON "HYDROTHERMAL STABILITY" AND "LOW TEMPERATURE" PERFORMANCE | | | | | |
| | A. | BAS | SF Ignores the Claims | 3 | | |
| | B. | BAS | SF Ignores the Specification | 5 | | |
| | | 1. | The Specification Fails to Describe the Properties of All the Claimed Catalysts | | | |
| | | 2. | The Specification Explains that It Is "Free Copper" That Provides "Improved Hydrothermal Stability" | 7 | | |
| | | 3. | "Improved Hydrothermal Stability" Is an Optional Property | 8 | | |
| | C. | Tem | Unclaimed Features of "Hydrothermal Stability" and "Low nperature" Performance Not Shared by All the Claimed Catalysts not Serve as a Basis to Distinguish the Prior Art | 9 | | |
| II. | THERE IS NO NEXUS BETWEEN BASF'S "SECONDARY CONSIDERATIONS" AND THE CLAIMS | | | | | |
| | A. | The | re Was No Skepticism in the Art1 | 1 | | |
| | B. | BAS Rise | SF Has Failed to Establish that the Claimed Subject Matter Gives to Unexpected Results | 4 | | |
| | | 1. | The Examples in the Specification Do Not Show Unexpected Results Across the Claimed Ranges | 4 | | |
| | | 2. | BASF Misidentifies the "Closest Prior Art"1 | 5 | | |
| | | 3. | The Other Evidence of Record Also Does Not Establish Unexpected Results | 6 | | |
| | C. | | SF Has Failed to Come Forward with Sufficient Evidence of nmercial Success | 8 | | |
| III. | BA | SF I | GNORES THE TEACHINGS OF THE PRIOR ART2 | 0 | | |
| | A. | Zon | es in view of Maeshima2 | 0. | | |



| | 1. | 1. Zones and Maeshima Supply Adequate Motivation to Combine. | |
|------|-----|--|----|
| | 2. | One of Ordinary Skill in the Art Would Have a Reasonable | |
| | | Expectation of Success | 22 |
| B. | Zor | nes and Maeshima in Further View of Patchett | 23 |
| CONC | LUS | ION | 25 |



INTRODUCTION

Petitioner Umicore respectfully submits its reply in support of its Petition for IPR of the '662 patent. BASF has failed to identify any claim limitations missing from the prior art. Instead, it argues that the claims are patentable because a single, specific commercial embodiment purportedly produces better low temperature SCR performance and hydrothermal durability than prior art compositions.

Neither property, however, is a claim limitation. Nor are the claims otherwise restricted to just compositions that have these properties. In fact, the patent specification itself establishes that these properties are not possessed by all the claimed compositions. As a result, the prior art, which discloses catalysts overlapping the claimed composition ranges and explains that those catalysts can be used as SCR catalysts to reduce nitrogen oxides, renders the '662 patent's claims obvious and unpatentable.

ARGUMENT

As set forth in the petition, every claim element is found in the prior art and one of ordinary skill in the art would have been motivated to combine that art with an expectation of success. BASF has failed to meet its burden of establishing the existence of secondary considerations sufficient to overcome this strong prima facie case of obviousness.



According to BASF, the '662 patent's claims are directed to "a copper-exchanged aluminosilicate zeolite with the CHA structure type (i.e., CuCHA)" that purportedly "exhibit[s] excellent NOx conversion over a wide temperature range and excellent hydrothermal stability." (BASF Opp. at 9-10.) But, neither "improved hydrothermal stability" nor catalytic activity "over a wide temperature range" is required by the claims. Nonetheless, BASF asserts that these unclaimed "enhanced properties" "must be considered in the evaluation of obviousness." (Id. at 13.) BASF then criticizes the prior art for not expressly discussing the unclaimed properties. (See, e.g., id. at 27.) And, BASF further argues that the unclaimed properties overcame skepticism, provides evidence of unexpected results, and has allowed BASF's catalyst product to be commercially successful. (See id. at 39-45.)

BASF's arguments ignore what the patent actually describes and claims. Again, the "enhanced properties" are not required by the claims. And, both the specification and BASF's expert have made clear that they are not inherent properties of the claimed catalysts. As a result, whether a limited subset of catalysts in the '662 patent possess these unclaimed properties is simply not relevant to the obviousness inquiry.



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

