UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

THALES VISIONIX, INC.,
Patent Owner

U.S. PATENT NO. 6,922,632
U.S. PATENT NO. 7,725,253

IPR2022-01304
IPR2022-01305
IPR2022-01308

DECLARATION OF YOHAN BAILLOT UNDER C.F.R. § 1.68 IN SUPPORT OF PATENT OWNER'S RESPONSES TO PETITIONS FOR *INTER PARTES* REVIEW OF U.S. PATENT NOS. 6,922,632 AND 7,725,253

June 14, 2023

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

TABLE OF CONTENTS

I. Introduction....1
II. Qualifications....2
A. Education Background and Career History....2
B. Publications and Patents....2
C. Other Relevant Qualifications....4
III. LEGAL STANDARDS....4
IV. THE ’632 AND ’253 PATENTS....6
V. REFERENCES....10
A. Welch 2001....10
B. Welch 1997 and Welch Thesis....12
C. Horton....12
D. Kramer....14
E. Chen....14
F. Harris....15
G. Reitmayr....15
VI. PERSON OF THE ORDINARY SKILL IN THE ART....15
VII. CLAIM CONSTRUCTION....16
A. “Estimation Subsystem / Estimation Module,” “Sensor Subsystem,” and “Coupling”....16
B. “Sensor Module”....21
C. “Configuration Data” / “Configuration Information”....22
D. “Configuring”....28
E. “Enumerating a set of sensing elements available to a tracking system”....31
F. “Expected Utility of a Measurement”....34
G. “Set of sensing elements”....36
VIII. SPECIFIC GROUNDS IN PETITION NO. 2022-01304....36
A. Ground I: Welch 2001 and Welch 1997....36

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

1. Claim 1 37
2. Claim 2 – "The method of claim 1 wherein coupling the sensor subsystem to the estimation subsystem includes coupling software modules each associated with one or more of the sensing elements." 43
3. Claim 3 – "The method of claim 2 wherein each of the software modules provides a software interface for receiving information related to an expected sensor measurement and providing measurement information that depends on said received information." 44
4. Claim 11 48

B. Ground II: Welch 2001, Welch 1997, and Welch Thesis 51

C. Ground III: Horton 52

1. Claim 1 52
2. Claim 2 – "The method of claim 1 wherein coupling the sensor subsystem to the estimation subsystem includes coupling software modules each associated with one or more of the sensing elements." 61
3. Claim 3 – "The method of claim 2 wherein each of the software modules provides a software interface for receiving information related to an expected sensor measurement and providing measurement information that depends on said received information." 63
4. Claim 6 – "The method of claim 1 wherein the state estimate characterizes configuration information for one or more sensing elements fixed to the object." 66
5. Claim 9 - "The method of claim 1 wherein the state estimate characterizes configuration information for one or more sensing elements fixed in an environment of the object." 67
6. Claim 11 68
7. Claims 20-21 – "The method of claim 1 wherein repeatedly updating the state further includes: selecting a pair of sensing elements for measurement; and providing an identification of the selected pair to the sensing

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

subsystem" and "The method of claim 20 wherein selecting the pair of sensing elements includes selecting said elements according to an expected utility of a measurement associated with said elements to the updating of the state." 71

D. Ground IV: Horton and Welch 1997 72

E. Ground V: Kramer and Chen and Ground VI: Kramer, Chen, and Welch 1997 74

IX. SPECIFIC GROUNDS IN PETITION NO. 2022-01305 77

A. Ground I: Welch 2001 and Welch 1997 77

1. Claim 30 77

2. Claim 32 – "The sensor module of claim 30 wherein the received information related to an expected sensor measurement includes a predicted pose of a sensing element relative to the measurement sensor." 82

3. Claim 33 83

4. Claim 34 - "The method of claim 33, further comprising selecting a pair of sensing elements from the sequence of candidates, the selected pair of sensing elements being ready to make a measurement at the time of selection of the pair or at a predefined time after the time of selection of the pair, the selected pair having highest expected utility of a measurement among the sequence of candidates." 88

5. Claim 36 - "The method of claim 35 wherein the target comprises a natural feature in an environment." 90

6. Claim 44 92

7. Claim 47 93

8. Claim 59 - "The method of claim 47 wherein providing configuration information from the sensor modules includes providing information characterizing a type of a sensor associated with a sensor module." 99

9. Claim 60 - "The method of claim 47 wherein providing configuration information from the sensor modules includes providing information characterizing a position

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

or an orientation of a sensor associated with a sensor module." 101

B. Ground III: Welch 2001, Welch 1997, and Harris 103

C. Ground IV: Horton 104

1. Claim 30 104

2. Claim 32 - "The sensor module of claim 30 wherein the received information related to an expected sensor measurement includes a predicted pose of a sensing element relative to the measurement sensor." 109

3. Claim 33 110

4. Claim 47 113

5. Claim 50 - "The method of claim 47 wherein providing the estimation module includes providing a module that is configurable to use different sets of sensor modules coupled to it." 121

6. Claim 59 - "The method of claim 47 wherein providing configuration information from the sensor modules includes providing information characterizing a type of a sensor associated with a sensor module." 123

D. Ground V: Horton and Welch 1997 124

1. Claim 34 - "The method of claim 33, further comprising selecting a pair of sensing elements from the sequence of candidates, the selected pair of sensing elements being ready to make a measurement at the time of selection of the pair or at a predefined time after the time of selection of the pair, the selected pair having highest expected utility of a measurement among the sequence of candidates." 125

X. SPECIFIC GROUNDS IN PETITION NO. 2022-01308 127

A. GROUND I: Welch 2001 and Welch 1997 127

1. Claim 1 127

2. Claim 6 131

3. Claim 7 - "The method of claim 6, further comprising selecting a pair of sensing elements from a sequence of

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.