Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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Analog Devices, Inc.

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement

187	209	15	7
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

Filtering statement — methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper's authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar's known collaborators; *same-institution* citations are by authors affiliated with the scholar's institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar's own circle.

Known limitations — counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight — re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar's own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

100.0% independent of 24 classified citing papers

Citation type	Count
Independent	24
Self-citation	0
Co-author	0
Same-institution	0

163 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total — the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing — how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner's choice of comparison field.

Contribution 1

Claim — Contribution 1

The researcher developed foundational designs for EMF-suppressing magnetic shields in high-power EV wireless charging, subsequently advancing the field through critical analyses of inverter dead-time effects and coil misalignment sensitivity in dynamic systems.

CLAIM: The researcher's contribution centers on the design of electromagnetic field suppressing magnetic shields for 100-kW DD-coil wireless charging systems, as established in their 2019 core paper. This work serves as the foundation for subsequent investigations into system efficiency and robustness.

ORIGINALITY: This line of work appears to address critical engineering challenges in high-power wireless power transfer. Following the initial shield design, the researcher expanded the scope to include the impact of inverter dead-time in single-phase systems and the sensitivity of coil misalignment in 200-kW dynamic transfer systems with LCC-S and LCC-P compensation, suggesting a comprehensive approach to optimizing system performance under real-world constraints.

SIGNIFICANCE: The core paper has garnered 53 citations, while the follow-up studies have received 21 and 18 citations respectively. Notably, 100% of the classified citing papers originate from independent researchers, indicating that this body of work has been widely adopted and validated by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Design of an EMF suppressing magnetic shield for a 100-kW DD-coil wireless charging system for electric vehicles

2019 · 2019 IEEE Applied Power Electronics Conference and Exposition (APEC), 1521-1527, 2019 · 53 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Wireless charging technologies for electric vehicles: Inductive, capacitive, and magnetic gear	Eaton Corporation, Zagazig University	Egypt, United States	—
2	Elektrikli araçların kablosuz şarj edilmesinde kullanılan güç aktarım yöntemlerinin incelenmesi	Naci Yazgan University, NUH NACI YAZGAN UNIVERSITY	Turkey	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

The impact of inverter dead-time in single-phase wireless power transfer systems

2021 · IEEE Transactions on Power Electronics 37 (1), 1074-1089, 2021 · 21 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	A fixed-frequency second-order generalized integrator phase-locked loop-based phase synchronization control in multisegment wireless power transfer systems	Shandong University	China	—
2	Output quality improvement for single-phase inverter in V2G system	Chonnam National University	South Korea	—

No.	Citing paper	Citing institution(s)	Country	S2
3	[A Zero-Crossing Detection Method for Synchronous Rectification Based on Digital Sampling Interpolation]()	Harbin Institute of Technology	China	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

The sensitivity analysis of coil misalignment for a 200-kW dynamic wireless power transfer system with an LCC-S and LCC-P compensation

2021 · 2021 IEEE Transportation Electrification Conference & Expo (ITEC), 1-8, 2021 · 18 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	New design of high-power in-motion inductive charger for low power pulsation	Eaton Corporation, Zagazig University	Egypt, United States	—
2	LCC-S compensated variable inductor-based hybrid topology analysis for inductive power transfer system	Akdeniz University, TUBITAK National Observatory	Turkey	—
3	Stability Analysis of Series-Series Wireless Power Transfer System Based on Sobol'Global Sensitivity Analysis	Chengdu University of Information Technology	China	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim — Contribution 2

The researcher developed a dynamic ZVS angle control method using a tuning capacitor to optimize wireless power transfer systems, establishing a foundational approach for efficient energy transmission.

The researcher's contribution centers on the 2021 paper titled 'Analysis and Demonstration of a Dynamic ZVS Angle Control Using a Tuning Capacitor in a Wireless Power Transfer System.' This work appears to introduce a specific control strategy leveraging a tuning capacitor to achieve Zero Voltage Switching (ZVS) dynamically, addressing efficiency challenges in wireless power transfer architectures.

This line of work suggests an original approach to managing switching conditions in wireless systems. By focusing on dynamic angle control via a tuning capacitor, the research likely addresses limitations in static or less adaptive control methods, offering a novel mechanism to maintain optimal switching states under varying load or coupling conditions.

The significance of this contribution is evidenced by its citation record, with 67 citations indicating substantial uptake by the broader scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has influenced peers outside the researcher's immediate institution and collaboration network, underscoring its independent impact and relevance to the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 14

CORE PAPER

Analysis and Demonstration of a Dynamic ZVS Angle Control Using a Tuning Capacitor in a Wireless Power Transfer System

2021 · IEEE Journal of Emerging and Selected Topics in Power Electronics 9 (2 ..., 2021 · 67 citations (GS)

Field-normalised: 43 Semantic Scholar citations place it in the top 10% of Engineering papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A review of underwater inductive wireless power transfer system	Xi'an Jiao Tong University, Xi'an University of Technology, Yulin University	China	—
2	Perspectives on control strategies for CC-CV charging in Resonant Inductive Power Transfer systems: a review of SS-RIPT configuration	IIT Jodhpur	India	—
3	Wireless charging system for unmanned aerial vehicles using lightweight and compact receiver modules	Northeast Forestry University	China	—
4	A Review of Underwater Inductive Wireless Power Transfer and Capacitive Wireless Power Transfer System	Xi'an University of Technology	China	—
5	Underwater Wireless Power Transfer for Unmanned Systems: State-of-the-Art Review	Chongqing Technology and Business University, Chongqing Vocational College of Public Transportation, Harbin Engineering University	China	—
6	A novel noncommunication-based inductive power transfer control technique for battery charging application	Indian Institute of Technology Patna, Shenzhen Polytechnic University	China, India	—
7	Comprehensive Analysis of Negative Energy Feedback–Based Mistuning Correction Strategy in Wireless Power Transfer Systems	Harbin Engineering University	China	—
8	Constant Voltage/Constant Current Wireless Charging System Based on Magnetic Flux–Controlled Inductor	Northeast Forestry University	China	—
9	Variable structure bidirectional underwater inductive wireless power transfer converter for the autonomous underwater vehicle	Shanghai Maritime University	China	—
10	Research on Constant Voltage Output Control of WPT System Based on Multi-Parameter Identification	Dalian Maritime University	China	—
11	A unity factor input wireless power transfer system utilizing an adaptive tuning capacitor	Three Gorges University	China	—
12	LCC-LCC/S hybrid compensation topology for wireless power transfer based on switch controlled capacitor with constant current and constant voltage characteristics	Harbin Engineering University, Xiamen University of Technology	China	—
13	Electromagnetically induced transparency (EIT) like control method for magnetic coupling wireless power transfer systems: Z.-J. Liao et al.	China University of Mining and Technology	China	—

No.	Citing paper	Citing institution(s)	Country	S2
14	Review of Tuning Methods in Wireless Power Transfer Systems	Wuhan University of Science and Technology, Wuhan University of Technology	China	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology* / *Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Harbin Engineering University	China	SCImago #1020 · THE 601–800 · QS 1001-1200	3
Xi'an University of Technology	China	SCImago #1938	2
Northeast Forestry University	China	SCImago #2408	2
Zagazig University	Egypt	SCImago #2907 · THE 1001–1200 · QS 1201-1400	2
Eaton Corporation	United States	—	2
Yulin University	China	SCImago #10118	1
Xi'an Jiao Tong University	China	—	1
Chongqing Vocational College of Public Transportation	China	—	1
Naci Yazgan University	Turkey	—	1
NUH NACI YAZGAN UNIVERSITY	Turkey	—	1
TUBITAK National Observatory	Turkey	—	1
Sree Rama Engineering College	India	—	1
Holy Mary Institute of Technology and Science	India	—	1
Marri Laxman Reddy Institute of Technology and Management	India	SCImago #10644	1
Dr. K.V. Subba Reddy Institute of Technology	India	—	1

Geographic distribution of citing authors

Country	Citing papers
China	16
India	3
Egypt	2
South Korea	2
Turkey	2
United States	2

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar’s own institution and circle** — the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution’s rank as probative on its own.

F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- ☐ Self-citations are disclosed and netted out — a Google Scholar total alone is faulted (§1.1).
- ☐ Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- ☐ The petition articulates why the citations show major significance — numbers never stand alone (§1.5).
- ☐ For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- ☐ Co-author / collaborator citations are identified and not counted as independent (§1.7).
- ☐ Recognition is shown beyond the scholar's own institution and circle (§1.8).
- ☐ Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- ☐ Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- ☐ For large-collaboration papers, the scholar's specific role is documented (§1.13).
- ☐ Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

Disclaimer

The AAO decisions referenced here are **non-precedent** — persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition’s merits. All analysis must be reviewed by qualified immigration counsel.

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition’s exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Design of an EMF suppressing magnetic shield for a 100-kW DD-coil wireless charging system for electric vehicles	8	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Analysis and Demonstration of a Dynamic ZVS Angle Control Using a Tuning Capacitor in a Wireless Power Transfer System	14	Dhanasar — Prong 2 (well-positioned)