



Bachelor thesis supervisor's review

CZECH TECHNICAL UNIVERSITY IN PRAGUE

Faculty of electrical engineering

Department of electrical power engineering

Technická 2, 166 27 Prague 6, Czech Republic

Effect of swept-sine speed on distortion-product otoacoustic emissions

Author: Ruoting Wang

Thesis supervisor: Ing. Václav Vencovský, Ph.D.

Rating (1 – 5)
(1 = best; 5 = worst):

1. Fulfillment of assignment requirements:	<input type="text" value="1"/>
2. Self-reliance and initiative during the thesis solution:	<input type="text" value="1"/>
3. Systematic solutions of individual tasks:	<input type="text" value="2"/>
4. Ability to apply knowledge and to use literature:	<input type="text" value="3"/>
5. Collaboration and consultations with the thesis supervisor:	<input type="text" value="1"/>
6. Thesis formal and language level:	<input type="text" value="2"/>
7. Thesis readability and structuring:	<input type="text" value="2"/>
8. Thesis professional level:	<input type="text" value="2"/>
9. Conclusions and their formulation:	<input type="text" value="2"/>
10. Final mark evaluation (A, B, C, D, E, F):	<input type="text" value="B"/>

verbal: very good

Brief summary evaluation of the thesis (compulsory):

Ruoting Wang in his thesis investigated speed limits of the synchronized swept sine technique for measurement of distortion-product otoacoustic emissions (DPOAEs). DPOAEs are intermodulation distortions generated in the inner ear. Their existence is employed for objective diagnostics of hearing impairment. Therefore, the ability to measure them fast and reliably is important. In his thesis, Ruoting investigated that reliable DPOAEs can be obtained at least up to the swept sine rate of 4 oct/sec and more importantly, his results suggest that the use of higher swept sine rate does not have to be compensated with greater number of repetitions required for temporal averaging for



reduction of the measurement noise floor. Ruoting fullfiled the requirements for the thesis. His initiative was excellent. I can only suggest him to be more independent in his work. Some results could be more elaborated and explained in the thesis and it would definatley gain more if it was proofreaded several more times.

Date: 26.1. 2024

Signature: