Technical Museum, Dresden

# Dr Gerhard Jehmlich

# IHAGEE

# History of the undertaking for the exhibition "Exakta in the whole world!"—the Dresden camera factory IHAGEE Dresden 2012

- 1. Development of the firm and camera manufacture
- 2. Outcomes, production and export
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- 4. Karl Nüchterlein

Picture credits: Rainer Dierchen of Riesa and Michael Sorms of Dresden

(Translator's note: Dr Jehmlich makes much use of footnotes in his text, and I have built my notes in with his. Mine are in italics, whether as footnotes or in the text. Many of Dr Jehmlich's references are to Hummel's book: I have translated these into references to The Ihagee Story. Many references to documents are listed with the abbreviation TSD, which means "Technical Museum of Dresden." The German idiom under which many names are written in capital letters is disregarded.

I have the German text only as a set of scans of the original document. Most of the pictures are of insufficient quality to withstand further scanning and reproduction here.)

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# 1. Development of the firm and camera manufacture

On 13 May 1912, Johan Steenbergen, at the age of 26, founded the firm known as

Industrie- und Handelsgesellschaft mbH (Industry and Trading Company Ltd) Manufacturer of photographic equipment and requisites 8 Marcolinistraße, Dresden A5<sup>1</sup>

He began with four camera-carpenters and made photographic accessories, which he sold together with the products of other manufacturers. When he began to make his own cameras, in 1913, he altered the firm's name to

Ihagee Kamera GmbH<sup>2</sup>

which was easier to remember. It was formed from the letters capitalised in the original name, with the G from "Gesellschaft." The 1914 catalogue showed eight different models, among them the "Photoklapp-Triplex" and the "Photoklapp-Mikrobie," the latter for  $4.5 \times 6$  cm plates. The war years from 1915 to 1918 seriously interfered with production.

In 1917 Steenbergen met Emil Englisch, who ran a small camera factory in Striesen<sup>3</sup> and who employed skilled technicians. The amalgamation of the two firms resulted in a new entry in the trades register, Sheet 14514 of the County Court Records of Dresden, on 11 December 1918, immediately after the end of the First World War. This was

Ihagee Kamerawerk Steenbergen & Co 85 Gottfried-Keller-Straße, Dresden A29<sup>4</sup>

and was listed as an Offene Handelsgesellschaft, a General Partnership<sup>5</sup>. Besides Steenbergen, who held 69% of the capital, the other partners were Emil Englisch, Otto Diebel, Hermann Schubert, Hugo Frauenstein, Conrad Koch and Emil Kirsch.

(Illustration: the famous picture of six heads, not showing Kirsch, who bought himself out in about 1929—not the same picture as Fig. 91 in The Ihagee Story, but the same heads. It's not clear whether these guys came from Englisch's firm or were new investors found elsewhere)

 $<sup>^{1}</sup>$  In the German idiom, all this information went into the local trading register. The name of the firm was just the first line.

<sup>&</sup>lt;sup>2</sup> I think this ought to be Ihagee Kamerawerk GmbH

<sup>&</sup>lt;sup>3</sup> Hummel says Englisch was in Blasewitz

<sup>&</sup>lt;sup>4</sup> in Cotta

 $<sup>^{\</sup>rm 5}$  see Note 18 on p5

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The era of the single-lens reflex camera began for Ihagee in 1921, first with the "Plan-Paff-Reflex," a box camera for  $4.5 \ge 6$  cm plates, soon followed by the "Roll-Paff-Reflex" for  $6 \ge 6$  cm roll film.

Karl Nüchterlein began his employment at Ihagee in 1923. A new factory was erected in Striesen<sup>6</sup>, in 1922-23, most modern and convenient from the point of view of manufacture with regard to the provision and arrangement of workplaces for 500 employees.<sup>7</sup>

(Illustration: the building in Schandauer-straße, The Ihagee Story Figure 92.)<sup>8</sup>

From 1924 the "Patent-Klappreflex" cameras, with shutter speeds from 1/15 sec to 1/1000 sec, were made with the help of Karl Nüchterlein.<sup>9</sup> For these cameras Steenbergen bought the scissors system<sup>10</sup> designed by his countryman William Brandsma. The range comprised:<sup>11</sup>

1924 6.5 x 9 cm
1925 9 x 12 cm
1927 10 x 15 cm
1929 9 x 9 cm
1929 6.5 x 9 cm, with rotating plateholder

Considerable numbers of these models were made in the new building. The registration of the trademark IHAGEE at the International Registry in Berne (No. 41591) came in 1925. The registration of the trademark EXAKTA in Germany took place on 25 November 1929. Its registration at the International Registry was not carried out until 1936.

In 1929 Werner Wurst began his sales training at Ihagee; by 1936 he was Advertising Manager and from 1946 he was a freelance journalist working for Ihagee. His numerous publications contributed very considerably to the international acceptance of the Exakta name.

<sup>&</sup>lt;sup>6</sup> 24 Schandauer-straße

<sup>&</sup>lt;sup>7</sup> See Ihagee Kamerawerk Steenbergen & Co Dresden. In The Photographic Industry, pp 709-714, publ. 1925

 $<sup>^8</sup>$  Jehmlich's caption says this is the final state of the building after the extensions of 1929, but a glance at Fig. 93 of The Ihagee Story will show that this is not so

<sup>&</sup>lt;sup>9</sup> The Ihagee Story, *p38—a passing reference only* 

<sup>&</sup>lt;sup>10</sup> precisely controlling the movements of the flap (The Ihagee Story, p36)

<sup>&</sup>lt;sup>11</sup> The Ihagee Story, *p38*, *lists all these and some others* 

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# (Illustration: Exakta Standard, fourth rebuild, 1938 (identified by the addition of the screwed flash socket); not a picture in The Ihagee Story)

From about 1930 Karl Nüchterlein worked on his idea for a compact mirrorreflex camera in the medium format, from then on called the small format. This was new ground in the manufacture of cameras. With his knowledge of the market, Steenbergen took up this idea right away, so that by 1933 the basic model could be put before the public. This type was made with 12 models in four ranges from 1934 to 1939, not counting the basic model which was without time-delay. The major features of delay and short and long shutter speeds, and control of the slit-shutter in the range from 12 sec to 1/1000, were retained in the following models the Kine Exakta and the Exakta Varex. For 38 years, up to 1972, the camera was produced without interruption.<sup>12</sup>

(Illustration: *Kine-Exakta, original model with round magnifier, Hummel Type 001; again not the same picture as in* The Ihagee Story)

The great experiment succeeded in 1936 with the first 24 x 36 mm miniatureformat mirror-reflex camera, designed by Karl Nüchterlein. It was the basic model of the compact miniature reflex camera, of which about 91,000 examples in 12 ranges were made until 1950 and which took Ihagee to its highest peak. In 1940 Ihagee began the production of war materiel. Up to 1943 only about 400 Kine-Exaktas were made, all for war reporters. Under the secret production mark "hwt" Ihagee manufactured munitions for the Army, and bombsights for remote-control weapons.<sup>13</sup>

With the Decrees of 15 January 1940<sup>14</sup> and 30 May 1940<sup>15</sup> regarding the disposal of enemy assets came the first break in the development of Ihagee. The part of the capital belonging to Steenbergen was transferred to a state-appointed trustee, and Steenbergen was expelled from his business. This was the trigger for much later changes, instigated by Steenbergen himself.

<sup>&</sup>lt;sup>12</sup> It is not clear that any were made between November 1943 and August 1945—see The Ihagee Story, *pp72*, 73

<sup>&</sup>lt;sup>13</sup> List of the Production Marks for Weapons, Munitions and Equipment. Berlin, 1944: printed at the High Command of the Army. In Pawlas, Karl R, *Newspaper Archive of Military and Weapon Affairs*. Nurnberg, 1977.

<sup>&</sup>lt;sup>14</sup> Reichs Decree of 20 January 1940, TSD AK 557, FA 241

<sup>&</sup>lt;sup>15</sup> Reichs Decree of 31 May 1940 (Norwegian, Dutch, Belgian and Luxemburger Assets), TSD AK 559, FA 455.

8 October 1941: Conversion of the production facilities to a joint-stock company,<sup>16</sup>

Ihagee Kamerawerk Aktiengesellschaft 24 Schandauer-straße, Dresden A19

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Entry in the Trade Register No. 836a Trustee Hans Manicke<sup>17</sup>

30 December 1941: Formation of the general partnership OHG Steenbergen & Co.<sup>18</sup> Agreement A: Ihagee's grounds and buildings will for a period of 30 years [that

is, until 30 December 1971] be leased by the OHG to the AG.

Agreement B: Use of the machines and a yearly figure for depreciation will be paid by the AG to the OHG.

Shareholders: Johan Steenbergen 300,000 RM; Steenbergen & Co 315,000 RM<sup>19</sup>; Emil Englisch, Otto Diebel, Hugo Frauenstein, Hermann Schubert, Conrad Koch, 27,000 RM each.

In May 1942 Steenbergen and his Jewish wife emigrated to the USA.

The second break in Ihagee's development was the complete destruction of the factory at 24 Schandauer-straße on 13-14 February 1945. The rebuilding and removal to the sometime Delta Works of Zeiss Ikon AG<sup>20</sup>, only partly damaged, followed the lease agreements of 22 May 1945 and 24 March 1948<sup>21</sup>. The official Restart of Ihagee, on 22 May 1945, *was formalised as* 

<sup>&</sup>lt;sup>16</sup> Certified copy from the trade register, part B. The AG was established on 8 October 1941. A Board of Directors and a Management Committee were set up, but held office only until the appointment of a Trustee for the AG on 15 July 1943. TSD AK 559, FA 476.

<sup>&</sup>lt;sup>17</sup> The Trustee was appointed by the Reichskommissar for the Treatment of Enemy Assets.

<sup>&</sup>lt;sup>18</sup> Trading Register No. HRA 2403 of 30 December 1941, TSD AK 557, FA 240. See also Heynderickx, Albert, *Johan Steenbergen and the Ihagee-Kamerawerk Dresden*.

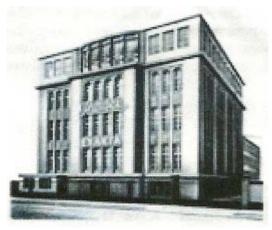
Nevertheless, an OHG with the same name had been in existence since 11 December 1918 (see above), and this was the condition of the business throughout Steenbergen's time in control, from then until 1941. The existence of the General Partnership has been treated very sketchily by all the historians I have read so far, including Jehmlich, perhaps because the letters OHG never appear in the registered firm's name, being occluded by the phrase "Steenbergen & Co." Only Heilenz, the Legal Adviser to Pentacon quoted in Blumtritt, Bilder und Dokumente, p37 (my translation p36) seems to be clear. And since the list of shareholders is the same in both cases, I hold that they are the same entity.

<sup>&</sup>lt;sup>19</sup> This list can only mean shareholders in the OHG, since the AG had been confiscated by the Nazis (sorry, transferred to a State-appointed trustee, with intent to deprive the foreign owner of control); and how can Steenbergen & Co have a shareholding in itself? If we ignore this curious entry, then Steenbergen's holding becomes 69% and the other five hold 31% between them, which we know from, for example, Heilenz, cited in Note 18 above, to be true.

 $<sup>^{20}</sup>$  Assignation as Reich's own plot of land in April 1945 (before the foundation of the Republic in 1949)

<sup>&</sup>lt;sup>21</sup> Lease agreement of 24 March 1948 between Regional Government of Saxony and the Ihagee AG, at 6800 RM a year. TSD AK 559, FA 469.

Ihagee Kamerawerk AG 41/43 Blasewitzer-straße, Dresden A16



(Illustration: the street frontage of the Blasewitzer-straße building. This is the righthand end of most pictures in Blumtritt and The Ihagee Story. The huge external signs "Ihagee" and "EXAKTA" can be made out with the eye of faith, if it knows where to look)

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From 28 September 1945, Rudolf Adamek was the Works Manager and Trustee. On 30 October 1945 Ihagee AG was placed under compulsory administration by Order No 124 of the Soviet Military authorities, which the Dutch Military Mission in the Allied Control Council contested, on the grounds that Ihagee was a Dutch firm.<sup>22</sup>

Ihagee did not come under the terms of the Nationalisation Referendum of 30 June 1946, and was handed back to its proprietors by the Regional Government of Saxony in May 1947.<sup>23</sup> However, it was not until 1 July 1948 that the Soviet Military Authority rescinded the seizure of Ihagee as an enemy asset.<sup>24</sup>

At a Board meeting on 25 July 1950 Max Rockstroh—a Director since June 1949—and Willy Teubner were appointed to the Board and the manufacture of a "cheap" camera (later the Exa) was confirmed.<sup>25</sup>

(Illustration: The Exakta Varex, engraved "Exakta VX" in the version Hummel 017, with the viewfinder folded down (cf the picture of Hummel 047) and the second viewfinder alongside—not a picture in The Ihagee Story)

<sup>&</sup>lt;sup>22</sup> Declaration of the Dutch Military Mission of 22 June 1946. See *The Ihagee Story*, p22

 $<sup>^{23}</sup>$  Regional Government of Saxony to Ihagee, 20 May 1947, TSD AK 559, FA 464. See The Ihagee Story, p23

 $<sup>^{24}</sup>$  Regional Government of Saxony to Ihagee, 1 July 1948, TSD AK 559, FA 465. See The Ihagee Story, p23

<sup>&</sup>lt;sup>25</sup> Transcription of the Minutes of that meeting, TSD AK 557, FA 242

The first miniature SLR with interchangeable viewfinders, the Exakta Varex, was produced from 1950. It was designed under the technical leadership of Willy Teubner. About 442,000 cameras of this type, in 17 models, were built. The basic idea of the interchangeability of the waist-level finder and the pentaprism very probably went right back to Nüchterlein.<sup>26</sup> A set of drawings dated 18 June 1945 already contained the basics of the idea.<sup>27</sup> The camera contained all the characteristic features of the Kine-Exakta and with its interchangeable viewfinders had the highest complement of features of any miniature camera of its time. From 1952 to 1955 Ihagee exported about 85% of its production of this camera and found itself in the strongest position of its whole existence.

In the same year, 1950, the first generation of the Exa appeared, of which the basic idea and the significant design features were thanks to Willy Teubner. For this camera the principle of the metal folding shutter<sup>28</sup> (fish-mouth shutter of the Pilot 6 of 1935) was used, which Benno B. Thorsch at Kamera Werkstätten Guthe & Thorsch . . .

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. . . designed and patented in 1933.  $^{29}$  Questions about this by Ihagee addressed to the VEB Kamera Werkstätten followed in 1949.  $^{30}$ 

The first-generation Exa was produced from 1950 to 1962; the second-generation from 1962 to 1987. About 1,000,000 cameras were made in 25 variations. The Exa II with a slit shutter lasted from 1960 to 1969, and about 300,000 units were built.

(Illustrations: (A) part of the patent applications for the "folding" shutter, much too blurred to be worth reproducing here and in any case without any technical description; (B) Exa I (sixth change), name embossed, Hummel 048)

On 1 March 1951 the VVB Optik Jena took over the trusteeship of Ihagee, in accordance with administration reforms for businesses with foreign proprietors. The business was now called

<sup>&</sup>lt;sup>26</sup> Rademaker, K: Kine-Exakta or Exakta "Varex," Photo-Deal Vol II, 2000, pp 34-5.

<sup>&</sup>lt;sup>27</sup> this set of drawings was found in the Technical Museum at Dresden (TSD). Because all of Ihagee's technical drawings were destroyed during the night of the air-raid, and no model existed, the basis for these drawings cannot be stated with certainty. It is however impossible that any completely new camera construction could have arisen in June 1945, immediately after the end of the war and still in the survival phase.

 $<sup>^{28}</sup>$  actually a rotating sector of a cylinder carrying the mirror. The bottom edge of the mirror acted as one blade of the shutter and a capping blind followed after a delay set by the speed selector (The Ihage Story p89n)

 $<sup>^{29}</sup>$  patent Nos 605720 Reflex camera, 614649 Reflex camera for roll film and 617774 Reflex camera for roll films, all 1933

<sup>&</sup>lt;sup>30</sup> questions by Ihagee to KW of 1 February 1950, whether the patent rights for this shutter still existed, TSD AK 552, FA 586

Ihagee Kamerawerk AG iV 41/43 Blasewitzer-straße, Dresden A16

The OHG Steenbergen & Co was now directly administered by the VVB Optik. These events were legally anchored in the "Decree relating to the Administration and Protection of Foreign Proprietors in the DDR" and can be seen as the third break in the life of Ihagee.<sup>31</sup> Steenbergen no longer had access to the financial aspects of the business remaining to him. Up to the mid-60s Ihagee had no influence on the efficiency of the production processes. Gradually Ihagee's planning and financial statements were brought into line with those of the nationalised industry. In 1958 the German Export and Import Company took over all the foreign trade in cameras in the DDR, and with it that of Ihagee. The independence of Ihagee as a production company was ended.

A step with grave consequences, and the fourth break for Ihagee, came with the General Meeting of the Ihagee shareholders in November 1959, with the decision to move the headquarters of the firm from Dresden to Frankfurt-on-Main, a decision which Johan . . .

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. . . Steenbergen as majority shareholder made alone, and which was sealed on 14 January 1960 with an entry for a new firm in The Trades Register of West Germany:  $^{32}$ 

Ihagee Kamerawerk AG 32 Friedrichstraße, Frankfurt/M

Then began the lawsuits about the headquarters, the trademarks, the patents and the models which were claimed by the new firm in Frankfurt, leaving but a shadow existence of Ihagee in Dresden. The uncertainty of the DDR authorities led to these actions having questionable outcomes and growing costs, as well as the recognition that no solution to a patent-free export capability of Ihagee was available. After nine years the legal arguments ended with the judgment of the BGH<sup>33</sup> on 30 January 1969 and led in 1972 to agreement that both businesses had a right to exist in the world market—up to a point admittedly, since *by then* they no longer existed.

After the end of the 1950s, after the preparation of the important accessories for the Varex and the Exa, there ensued an advancing stagnation in the systematic development and manufacture of new products. With the exception of the Exa II and its slit-shutter of 1960, variations in flash techniques and a light-meter

 <sup>&</sup>lt;sup>31</sup> Decree of the DDR of 15 September 1951, TSD AK 559, FA 469: see paragraph 14, "every disposal by foreign proprietors who are under administration and protection is forbidden."
 <sup>32</sup> Frankfurt District Court of 14 January 1960, Appendix 1 to Memorandum of 22 January 1960, TSD AK 552, FA 587

<sup>&</sup>lt;sup>33</sup> Bundesgerichtshof, West German High Court

accessory for external use, ever greater numbers of cameras<sup>34</sup> dominated the product line. Paths towards the modernisation and automation of camera techniques, including microelectronics, were not followed at Ihagee.

In one of the "Central Offices for the Protection of National Property" a frank discussion of ground principles was convened on 26 March 1963. The general hopelessness of the situation was clear, the outcomes of the lawsuits were uncertain, patent-free solutions capable of securing Ihagee's future were lacking, and a long-term reconciliation was needed.<sup>35</sup> In the following years all the steps introduced by the higher leadership echelons of the DDR (including among others the Ministry for Electrotechnics and Electronics) were administration measures, intended gradually to bring to an end the hopeless situation which the firm had entered.

It follows that the formal subordination of the development section of Ihagee (about 30 employees, including the prototype workshop) to the direction of VEB Pentacon, decreed on 1 September 1964, took place without any influence by Pentacon on the development work of Ihagee.<sup>36</sup> It was not until 15 February 1967 that the personnel of the development department of Ihagee were absorbed into Pentacon, and began the development of the Exakta VX 1000 and 500, which were produced in eight models from 1967 to January 1972.<sup>37</sup> These efforts were not enough to secure the future of Ihagee.

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The cessation of production at Ihagee followed on 31 December 1969. Under an agreement of 2 January 1970 between Ihagee and Pentacon on the suspension of obligations and credits, Pentacon bought the assets in stock for 5,912,061.65 marks.<sup>38</sup>

All the employees of Ihagee, with a few exceptions, were taken over by Pentacon and they were all employed there in a technical occupation. The AG iV and the OHG continued their legal existence.<sup>39</sup> Ihagee's building was taken into Pentacon as "Object 18" and used for microelectronic systems in cameras.

<sup>&</sup>lt;sup>34</sup> From 1965 to 1968 Ihagee made about 100,000 cameras, including variants of the Exa <sup>35</sup> Discussion at Ihagee Kamerawerk AG iV in Dresden on 26 March 1963, minutes dated 28 March. Taking part: Economic Government of the DDR, Ministry for Foreign Trade and Finance, WB (?) and Ihagee. TSD AK 556, FA 938.

<sup>&</sup>lt;sup>36</sup> *The Ihagee Story* p27, *although this is not quite what Hummel says.* An idea for the development of new cameras could not be realised, as a result of missing development personnel at Ihagee.

<sup>&</sup>lt;sup>37</sup> Even though the workforce was now employed by Pentacon, these were still recognisably *Ihagee cameras, in fact a development of the Varex.* They were designed by Herbert Stolze, a sometime employee of Ihagee. *See* The Ihagee Story, *pp84-7* 

<sup>&</sup>lt;sup>38</sup> Agreement between Ihagee Kamerawerk iV and Kombinat VEB Pentacon Dresden of 2 January 1970. TSD AK 557, FA 243

<sup>&</sup>lt;sup>39</sup> and were administered by a State Commission which must have had very little to do, since neither firm now had any assets (The Ihagee Story, p27)

The decisive factors in the development of Ihagee since 1945 were:

1. In the DDR private capital had basically just the chance of continued existence only so long as the national economy remained serviceable. After the third wave of expropriations in 1972, firms with private capital existed no longer.

2. The ideal resources and world market value before the war were not only maintained by the vigour and skill of the employees after 1945, but until well into the 1950s ideas for new development were brought out. After 1954-55 the development of equipment at Ihagee flattened out, leaving care and attention to the product without noteworthy creativity. Isolated models designated as prototypes were not developed further and were not taken into production. The range of equipment became obsolete when compared with international practice. The profitability of foreign exchange declined.

3. In parallel with this, the decision about the new foundation made by the majority shareholder Johan Steenbergen—in the eyes of the DDR a political opponent—led to momentously high expense for the transfer of trademarks and patents. This step was unequivocally a bad choice, loading heavy burdens onto Ihagee, without which a profit from the new foundation might have been achieved.

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# 2. Balance Sheets, Production and Export

# 2.1 Capital and balances

Johan Steenbergen formed the Industrie- und Handelsgesellschaft in 1912 with an opening capital of 26,000 Marks. After the construction of the new factory at 24 Schandauer-straße, the acquisition of fresh capital for the Third Wing building<sup>40</sup> (Bergmann-straße/Glashütter-straße) was determined upon, with an official estimate for land and buildings (two wings only) without machinery or furnishings of 296,500 gold marks at 31 December 1925.<sup>41</sup>

After the conversion of the firm into the Ihagee Kamerawerk AG<sup>42</sup> in 1941, the opening balance was reported as 1,546,752.82 Reichsmarks.<sup>43</sup> In spite of the loss

<sup>&</sup>lt;sup>40</sup> or, perhaps, the Third Grand Piano building, but this seems unlikely

<sup>&</sup>lt;sup>41</sup> Heynderickx, Albert: Johan Steenbergen and the Ihagee Kamerawerk Dresden, TSD AK 557, FA 230

<sup>&</sup>lt;sup>42</sup> Certified copy of the Trades Register, Part B, Foundation of the AG on 8 October 1941. A Board of Directors and a Control Committee for the AG were appointed, but held office only until the appointment of a Trustee of the AG on 15 July 1943. TSD AK 559, FA 476; *and see Note 15 above, which is identical to this one* 

of the factory at Schandauer-straße and the Restart at Blasewitzer-straße, the balance at 31 December 1945 was put at 1,780,485.32 Reichsmarks.<sup>44</sup>

From 1950 to 1970 Ihagee reported the following balances and profits<sup>45</sup>:

. .....

Millions of marks:					
	1950	1954	1957	1969	1970
Capital	4.5	10.6	9.8	21.3	13.4
Cumulative Profits	0.25	0.54	0.99	5.15	-

Although for the whole period from 1912 to 1970 the different monetary units are not comparable, it is clear that the value of Ihagee steadily climbed, above all from 1950 to 1970. The total loss of the factory in February 1945 led also to the loss of Steenbergen's own capital. By borrowing, and manufacture and sales of its own products, Ihagee iV managed from 1950 to 1969 to maintain its worth independent of Steenbergen's original outlay. Moreover, from 1955 to 1969 Ihagee received long-term loans of altogether 10,242,071 Marks.<sup>46</sup>

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To guarantee these loans Ihagee entered into security assignment agreements<sup>47</sup> of the whole of its movable plant with the German Investment Bank in Berlin from 1949 to 1969.<sup>48</sup> After 1963 that produced four or five million marks per year. In accordance with the agreement of 2 January 1970 between Ihagee and Pentacon on the suspension of obligations, Pentacon bought the assets in stock for 5,912,061.65 marks.<sup>49</sup> The opening balance of Ihagee on 1 January 1970, at the incorporation within Pentacon, amounted to 30.2 million marks.

# 2.2 Turnover and exports

In 1937-38 Ihagee's exports were about 50% of its entire turnover (1.4 million Reichsmarks), the highest percentage before 1945. This peak of exports into capitalist foreign countries (KA)<sup>50</sup> was reached again in 1949-50.<sup>51</sup> Exports from Ihagee into the KA reached a maximum of 81.5% of turnover in 1955; in 1959 it

<sup>&</sup>lt;sup>43</sup> Opening balance of Ihagee at 1 January 1941, TSD AK 559, FA 459

<sup>&</sup>lt;sup>44</sup> Balances of Ihagee at 31 December 1945, TSD AK 559, FA 461

 $<sup>^{\</sup>rm 45}$  Balances of Ihagee, TSD AK 553, FA 903-1 and 2, FA 904, FA 905

<sup>&</sup>lt;sup>46</sup> Long-term loans to Ihagee TSD AK 555, FA 929. These loans were considered as part of Ihagee's obligations in the usage agreements between Ihagee and Pentacon of 2 January 1970 *(see Note 37 above)* 

<sup>&</sup>lt;sup>47</sup> or, more simply, protective conveyances

 $<sup>^{48}</sup>$  Security Agreements 1949-68, TSD AK 555, FA 927, and Debit Deeds 1956-66, TSD AK 555, FA 928

<sup>&</sup>lt;sup>49</sup> See Note 37 above

<sup>&</sup>lt;sup>50</sup> Kapitalistische Ausland

<sup>&</sup>lt;sup>51</sup> Development of turnover since 1934, TSD AK 577, FA 244

was about 67% and in the following years up to 1969, under the nationalised industry, can be shown to have sunk to about 63%.<sup>52</sup>

In 1962 exports into the KA in Europe (11 countries) amounted to 3,148,600 DM, to the KA overseas (5 countries) 367,000 DM; total 3,515,600 DM. That corresponded to about 37% of the whole turnover in cameras of the DDR at the time, of 9.6 million Deutschmarks.<sup>53</sup> From 1965 to 1968 it turned out that the exports to West Germany (BRD) and the USA were as follows:

IVII	mons of west German Marks				
		1965	1966	1967	1968 (planned)
BRD	profits	5.2	5.0	4.0	4.0
	profits on foreign exchange	0.91	0.75	0.65	0.62
USA	profits	0.43	0.26	1.24	
	profits on foreign exchange	0.69	0.66	0.49	

Millions of West German Marks

In 1968 the profits on foreign exchange for Ihagee equipment fell to 0.4-0.5. It is given as the quotient of the profits per camera in West German Marks and the manufacturing price per camera in East German Marks.<sup>54</sup>

2.3 Production	of Exakta an	ld Exa models
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	1935-45	45-55	55-65	65-75	75-85	numbers	s made
Kine Exakta I, II	1936	-1950				91995	
Exakta Varex			1950-1967			441820	
Exakta VX 1000, 500				1967-72		<u>190318</u>	724133
Exa			1950-1987*			1060625	
Exa II	a II 1960-1969			<u>307792</u>	1368417 2092550		

\*from 1970 under the régime of Pentacon, in the ex-Ihagee building

2.4 Works Managers at Ihagee since the foundation of the AG

Hans Manicke	from 1 January 1942	appointed as Trustee <sup>55</sup>
Rudolf Adamek	29 September 1945	ex-Technical Director
Georg Wiesner	28 April 1946	ex-Prokurist
Otto Helfricht	28 November 1946	colleague of Nüchterlein
Werner Siegemund	4 November 1947	ex-Accounts Director

<sup>&</sup>lt;sup>52</sup> Jehmlich, G: VEB Pentacon Dresden. Dresden 2009

 $<sup>^{\</sup>rm 53}$  Sales of Ihagee products in 1962, TSD AK 557, FA 244

<sup>&</sup>lt;sup>54</sup> no, I don't understand this, either

<sup>&</sup>lt;sup>55</sup> Dates of Works Managers from Blumtritt, H: *History of the Dresden Photo Industry*, Stuttgart, 2000. *Italicised notes from* The Ihagee Story, *pp21-25*.

Willy Teubner 17 August 1948 Max Rockstroh 16 June 1949 Rudolf Krämer 1 December 1953 Walter Kretschmar 1 February 1954 Erwin Lorenz 23 January 1958 Horst Eisenkrätzer 1 February 1961 Karl Katzenmeier 1 August 1962 Horst Burghardt 1 February 1964 **Georg Francois** 1 June 1965 Helmut Arnold 25 May 1968

colleague of Nüchterlein ex-supervisory committee manager, FilmOsto works

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## 3. Johan Steenbergen (7 December 1886 – 7 November 1967)

(Illustration: portrait of Steenbergen<sup>56</sup>)

Johan Steenbergen was born in Meppel, The Netherlands. He came from a wealthy family, who had a business in the textile trade. Against the wishes of his father, who wanted to see him succeed to the family business, he was very interested in camera technicalities, and he managed to become a specialist in this field. In 1908 he became an apprentice in the Heinrich Ernemann Company making cameras in Dresden, and in 1912 he founded the Industry and Trading Company Ltd at 5, Marcolini-straße in Dresden. By amalgamating his firm with the factory of Emil Englisch he formed in 1918 the firm Ihagee Camera Works Steenbergen & Co, at 85 Gottfried-Keller-straße in Dresden.

At the same time he himself worked at the technical foundations of camera construction, taking out a patent in 1920<sup>57</sup> and concerned himself thoroughly with market research into the field of camera manufacture and marketing. Immediately after the Geman inflation, in 1922-3, he arranged for the construction of a prestigious new factory building at 24 Schandauer-straße in Dresden, and dominated the international market for mirror-reflex cameras with the Exakta 4 x 6.5 cm (in 1933) and the Kine-Exakta (in 1936). On 22 March 1929 he was named Honorary Consul of Her Majesty's Dutch Government in Dresden.

Following the decrees of 15 January and 31 May 1940 concerning the treatment of enemy assets, Steenbergen arranged the conversion of the existing manufacturing arm of his business into Ihagee Camera Company AG on 18 October 1941, and on the same day founded the General Partnership of Steenbergen & Co. Steenbergen was denied access to the factory buildings.<sup>58</sup> In

<sup>&</sup>lt;sup>56</sup> The same as Blumtritt, H: Documents and Pictures, Bild 66, and Fig 48 in my translation

<sup>&</sup>lt;sup>57</sup> No 342575: see Wichmann, Klaus: Exakta, von der Kine-Exakta bis zur Elbaflex (Stuttgart: Lindemanns Verlag, 1993), pp 168-9

<sup>&</sup>lt;sup>58</sup> So it's very unlikely that he "arranged" the conversions himself, and we know that he had founded the OHG in 1918 (p2 above)

May 1942 he emigrated with his Jewish wife to the USA. After his return to West Germany he became Dutch consul in Hanover, a professional appointment, on 22 August 1951.

After the subordination of Ihagee to the state-appointed Trustee of the DDR in 1951, Steenbergen no longer had access to the parts of the business that yet remained to him. As majority shareholder he decided himself in November 1959 to transfer the firm's headquarters from Dresden to Frankfurt-on-Main, after which legal actions began regarding the headquarters, patents and trademarks, which were only resolved in 1972 by mutual agreement.

On 16 January 1961, Johan Steenbergen received the Federal Service Cross of West Germany for his life's work. He had as expert and employer in his firm managed the essentials for the origin of important fundamental mirror-reflex cameras and with that he decidedly contributed to the international reputation of the Dresden . . .

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. . . camera industry. He died on 7 November 1967 in Bonn, and was buried in the Nussbaum family tomb in Bonn.



The Nussbaum gravestone. The three names in the left-hand column are John A. Nussbaum, Elisabeth Steenbergen and Johan Steenbergen. It is not possible to decipher the smaller lettering

# 4. Karl Nüchterlein (14 April 1904 – reported missing April 1945)

(Illustration: portrait of Nüchterlein<sup>59</sup>)

After his apprenticeship as a mechanic in the Dresden factory of Seidel & Naumann, Karl Nüchterlein joined Ihagee as a mechanic in 1923. Very soon he displayed his own ideas for the realisation of Steenbergen's favourite mirror-reflex cameras, and of the Patent Klapp-Reflex 6.5 x 9 cm with rotating plate-holder (1924) and the Ihagee Night-cameras with and without the reflex system (1929 and 1930).

At the beginning of 1930 Nüchterlein put forward the basic new idea for a compact, convenient, SLR camera in the medium format. This concept was immediately accepted by Steenbergen, who himself had an excellent appreciation of the market. By 1933 the production of the Exakta 4 x 6.5 cm for roll film began, and it was built in four models as the fundamental product of Ihagee.<sup>60</sup>

The unusual mechanical concept of this camera lay in the use of mutually coupled long-time and short-time controls for the slit-shutter, in the end with speeds in the range from 12 sec to 1/1000, and retained in all Exakta cameras during a period of 39 years, from 1934 to 1972.

In 1936 Ihagee put forward the Kine-Exakta, designed by Nüchterlein, the first SLR for cine-film, in which the mechanical-optical basic principle of the Exakta 4 x  $6.5 \text{ cm} \dots$ 

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. . . but proportionally reduced to the 24 x 36 mm format was repeated. This camera, produced in twelve different models up to 1950, was the world's leading miniature mirror-reflex camera.<sup>61</sup> It is very probable that the idea for interchangeable direct-vision and prismatic viewfinders also goes back to Nüchterlein.<sup>62</sup> In the Reconstruction a set of drawings dated 18 June 1945 show the basic details of this idea.<sup>63</sup>

The Exakta Varex, which Willy Teubner looked after after 1949, was produced by Ihagee in 17 models up to 1967.<sup>64</sup> Nüchterlein worked on a version of the lightmeter behind the lens, what in English is called through-the-lens metering, which he protected by patent.<sup>65</sup>

 <sup>&</sup>lt;sup>59</sup> The same as Blumtritt, H: Documents and Pictures, Bild 56, and Fig 59 in my translation
 <sup>60</sup> The Ihagee Story, pp 41 et seq

<sup>&</sup>lt;sup>61</sup> The Ihagee Story, *pp* 70-75

<sup>&</sup>lt;sup>62</sup> Rademaker, K: *Kine-Exakta or Exakta "Varex,"* Photo-Deal Vol II, 2000, pp 34-5 (and see Note 25 above, of which this is a copy)

<sup>&</sup>lt;sup>63</sup> see the very long note 26, which Jehmlich reproduces word for word here

<sup>&</sup>lt;sup>64</sup> The Ihagee Story, pp 76-83

<sup>&</sup>lt;sup>65</sup> Patent Nos 722135 and 736438, both of 1939. For determining the brightness of the picture, though admittedly only the unimportant borders of the frame were measured. *The complete text of Patent 722135 is in* The Ihagee Story, *pp 51-2* 

Altogether he took out 20 patents to do with the camera body. In 1940 he was called up into the military, and he has been missing since 1945. Internationally he is seen as one of the most important camera technicians. His epoch-making idea for a compact mirror-reflex camera, which was developed further by other people, made this camera type a world success.

#### *References* (supplied by the translator)

- Blumtritt, Herbert. *Bilder und Dokumente aus dem Ihagee Kamerawerk Dresden.* Privately published from Dresden, 2008
- Hummel, Richard. Spiegelreflexkameras aus Dresden. Edition Reintzsch, Leipzig, 1995
- Spencer, Michael. *The Ihagee Story*. Translation into English of the Ihagee-related parts of Hummel, above. The Exakta Circle, Pittenweem, 2005